

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

FINAL
SITE-SPECIFIC ENVIRONMENTAL ASSESSMENT
No. N-2526

Exploratory Activity
Florida Middle Ground Area, Blocks 455, 456, 587
Leases OCS-G 8363, 8364, 8368

September, 1986

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

FINAL
SITE-SPECIFIC ENVIRONMENTAL ASSESSMENT
No. N-2526

Exploratory Activity
Florida Middle Ground Area, Blocks 455, 456, 587
Leases OCS-G 8363, 8364, 8368

September, 1986

ENVIRONMENTAL IMPACT STATEMENT DETERMINATION

In my opinion, approval of Tenneco Oil Exploration and Production's Plan of Exploration described in SEA No. N-2526 pursuant to the specific mitigation/special protection measures outlined therein, does not constitute a major Federal action significantly affecting the quality of human environment in the sense of The National Environmental Policy Act (NEPA), Section 102(2)(c). In rendering this opinion, I have given special consideration to 30 CFR 250.34-4 (compliance with NEPA).



Acting Chief, Environmental Operations Section
Gulf of Mexico OCS Region


9-5-86

Date

FINDING OF NO SIGNIFICANT IMPACT

"I have considered Tenneco Oil Exploration and Production's proposed Plan of Exploration in the context of Site-Specific Environmental Assessment (SEA) No. N-2526 and find based on the analysis of environmental considerations provided therein, no evidence to indicate that the proposed action will significantly (40 CFR 1508.27) impact the quality of the human environment."

Therefore, I determine that an environmental impact statement will not be prepared for this action.



Regional Supervisor for Leasing and Environment
Gulf of Mexico OCS Region

9/5/86

Date

Commodity Oil and Gas

SEA No. N-2526

United States Department of the Interior
Minerals Management Service
Gulf of Mexico OCS Region
New Orleans, Louisiana

OCS SITE-SPECIFIC ENVIRONMENTAL ASSESSMENT

September, 1986

Operator Tenneco Oil Exploration
and Production

Plan Type Plan of Exploration

Area Florida Middle Ground Area,
Blocks 455, 456, 587

Leases OCS-G 8363, 8364, 8368

Date Submitted August 4, 1986

Plan Commencement Date September, 1986

Prepared by Charles Hill

Related Environmental Documents

FEIS for OCS Lease Sale No. 94

Area-Wide Environmental Assessment for Exploration Activities in the
Northeast Section of the Eastern Planning Area

TABLE OF CONTENTS

	PAGE
ENVIRONMENTAL IMPACT STATEMENT DETERMINATION	1
FINDING OF NO SIGNIFICANT IMPACT	1
FIGURES	vi
ABBREVIATIONS AND ACRONYMS	vii
INTRODUCTION	1
I. DESCRIPTION OF THE PROPOSED ACTION	3
A. GENERAL	3
B. EQUIPMENT AND SUPPORT SYSTEMS	3
C. SCHEDULE OF ACTIVITIES	6
D. TRANSPORTATION ROUTES	6
E. PERSONNEL REQUIREMENTS	6
F. TECHNOLOGY	7
G. CONTINGENCY PLANS	7
H. DISCHARGES AND EMISSIONS	7
1. General	7
2. Solid Wastes	7
3. Liquid Wastes	8
4. Gaseous Wastes	8
I. STATE CERTIFICATION	8
J. MEASURES FOR COMPLIANCE	9
K. NEARBY PENDING ACTIONS	9
II. ALTERNATIVES TO PROPOSED ACTION	9
III. DESCRIPTION OF THE AFFECTED ENVIRONMENT	10
IV. ENVIRONMENT CONSEQUENCE*	10
A. OIL SPILLS	10

	Page
1. Oil Spill Accidents	10
2. Vulnerability of Coastal Land Segments to Oil Spills	10
3. Effects of Oil Spills on the Environment	11
B. ENVIRONMENTAL IMPACTS OF THE PROPOSED ACTION	11
1. Impacts Concerning Geology	11
2. Impacts Concerning Meteorology	11
3. Impacts Concerning Physical Oceanography	13
4. Impacts on the Biological Environment	13
a. Impacts on Coastal Habitats	13
b. Impacts on Offshore Habitats	13
(1) Impacts on the Pelagic Environment	13
(2) Impacts on the Benthic Environment	13
(3) Impacts on Sensitive Underwater Features	13
c. Impacts on Endangered or Threatened Species	13
d. Impacts on Breeding Habitats and Migration Routes	14
e. Impacts on Protected Areas of Biological Concern	14
C. IMPACTS ON SOCIOECONOMIC CONDITIONS AND CONCERNS	14
1. Impacts to Economic and Demographic Conditions	14
a. Impacts on Local Employment	14
b. Impacts on Local Population and Industry Centers	14
2. Impacts on Land Use	14
a. Impacts of Increased Demands on Community Services	14
b. Impacts of Increased Boat and Air Traffic	15
c. Impacts of Competition for Scarce Coastal Resources and Demands for Goods and Services	15
(1) Supplies and Equipment	15
(2) Water	15
(3) Aggregate Energy	15
(4) Other Resources	16
3. Impacts from Construction of Onshore Support Facilities	16
4. Impact of Public Opinion	16
5. Impacts on Navigation	16
6. Impacts Concerning Military Use	16
7. Impacts on Commercial Fishing	17
8. Impacts on Recreation/Tourism	17

	Page
9. Impacts on Cultural Resources	17
10. Impacts on Water Quality	17
11. Impacts on Air Quality	18
12. Impacts on Other Commercial Uses	18
13. Impacts on Other Mineral Uses	18
14. Impacts Concerning Pipelines and Cables	18
15. Impacts of Ocean Dumping	18
D. UNAVOIDABLE ADVERSE IMPACTS	19
V. CONSULTATION AND COORDINATION	19
VI. BIBLIOGRAPHY	20
VII. PREPARERS	21
VIII. APPENDICES	22
A. LEASE STIPULATIONS	23
B. REVIEWS FROM MMS	35
C. REVIEWS FROM OTHER AGENCIES	45

FIGURES

PAGE

- I-1 Geographic Location of Florida Middle Ground
Blocks 455, 456, 587
- I-2 Proposed Location Plat
- I-3 Bathymetry Map of the Area

ABBREVIATIONS AND ACRONYMS

AEA	Area-Wide Environmental Assessment
CGA	Clean Gulf Associates
CZM	Coastal Zone Management
DEIS	Draft Environmental Impact Statement
FMG	Florida Middle Ground
ft	feet
FEIS	Final Environmental Impact Statement
FREIS	Final Regional Environmental Impact Statement
FRU	Fast Response Unit
GOM	Gulf of Mexico
km	kilometers
m	meters
mi	miles
MMS	Minerals Management Service
NEPA	National Environmental Policy Act
NTL	Notice to Lessees and Operators
OCS	Outer Continental Shelf
POE	Plan of Exploration
SEA	Site-Specific Environmental Assessment
SER	Site-Specific Environmental Report
USDI	U.S. Department of the Interior
USEPA	U.S. Environmental Protection Agency

INTRODUCTION

This Site-Specific Environmental Assessment (SEA) submitted in support of an Area-wide Environmental Assessment (AEA) is written for exploration activity proposed for Florida Middle Ground Blocks 455, 456, and 587. The SEA contains site-specific and updated information for the proposed action in these Blocks that is not contained in the AEA. The SEA was prepared using the AEA dated January 1985, entitled "Area-Wide Environmental Assessment for Exploration Activities in the Northeast Section of the Eastern Planning Area" as a base document. This base document can be obtained through the Public Records Office of the Minerals Management Service (MMS), Gulf of Mexico (GOM) Region, Outer Continental Shelf (OCS) Office. Those sections of the AEA that are referenced in the SEA are indicated throughout the text.

In compliance with the National Environmental Policy Act (NEPA), this AEA/SEA concept implements the tiering process outlined in 40 CFR 1502.20 which encourages agencies to tier environmental documents to eliminate repetitive discussions of the same issue. By use of reference to the AEA, and to Tenneco's Plan of Exploration (POE), this SEA concentrates on the issues specific to the proposed action. Indeed, the bulk of the information contained in this SEA are derived from the POE and the AEA, and thus are not specifically cited in every instance. The significance of potential environmental consequences of the proposed action are evaluated in this SEA pursuant to criteria in 40 CFR 1508.27. The SEA conforms to the guidelines for preparing environmental assessments in compliance with the requirements of 30 CFR 250.34 and NEPA using information presented in the AEA.

I. DESCRIPTION OF THE PROPOSED ACTION

A. GENERAL

The need for the proposal results from the mandate of the Outer Continental Shelf Lands Act (Section 11) which requires submission of exploration plans. This proposal contains the lessee's/operator's specific operational drilling proposal to explore the leases in a diligent manner. It will serve as a basis for the MMS to make reasoned decisions regarding methods for developing resources of the OCS in an orderly, safe, and environmentally acceptable manner.

Tenneco Oil Exploration and Production (hereafter Tenneco) filed a Plan of Exploration (POE), and a Site-Specific Environmental Report (SER) on July 23, 1986, for Florida Middle Ground Area, Blocks 411, 412, 455, 456, 499, 500, 543, 587 (Leases OCS-G 8361 through 8368). Activities are proposed only on Blocks 455, 456, and 587, hereafter referred to as "the Blocks". The area for which the exploration activities are planned is located approximately 193km, (120 mi) southeast of Panama City, Florida (Figure I-1). Water depths in the surveyed portions of the blocks range from 122m (400 ft) in Block 412 to 174m (571 ft) in Block 587. Tenneco is the operator of the leases on the Blocks, which it has leased in partnership with Texaco, Inc., and Anadarko Petroleum Corporation (Racal, 1986).

The objective of the proposed operation is to evaluate the hydrocarbon potential of the Blocks. A typical semi-submersible drilling rig, such as the MARLIN VII, would be used to drill up to ten exploratory wells. The surface locations for these proposed wells are shown in Figure I-2. The wells would be drilled, evaluated, and either temporarily or permanently abandoned in accordance with OCS Order No. 3. The operator plans to commence drilling in September, 1986. Drilling of the remaining wells would be contingent upon the results of the first well. This action is considered routine for the Gulf of Mexico. For additional information concerning the proposed action, refer to Tenneco's POE.

B. EQUIPMENT AND SUPPORT SYSTEMS

Due to rig availability and scheduling of operations in the eastern Gulf of Mexico, the exact rig to be used would be included when the Applicant for Permit to Drill is admitted. A semi-submersible drilling rig is proposed for drilling the exploratory wells. It would be equipped, pursuant to OCS Order Nos. 2, 3, and 4, with safety and pollution prevention and control features. Standard industrial equipment, such as a sub-surface Blowout Preventer (BOP) stack and a sub-surface water system would be employed throughout the operation. Details of the safety systems available on the rig are contained in the POE. Other activities proposed by the operator to limit pollution effects are presented in the POE and SER.

Supply terminal would be located in Panama City, Florida. This facility would consist of sufficient commercially available public or private dockage to handle cargo and standby vessels, and open and/or closed storage areas for drilling supplies. A mobile trailer may be placed on site for use as an office and living quarters for transportation/purchasing staff employees. Helicopter operations would take place at existing facilities in Panama City. No new construction, dredging or filling would be required for the proposed onshore support base. Additional information on this facility and the proposed activities expected to originate from it are included in Sections III.C.2. and IV.C.3 of this SEA.

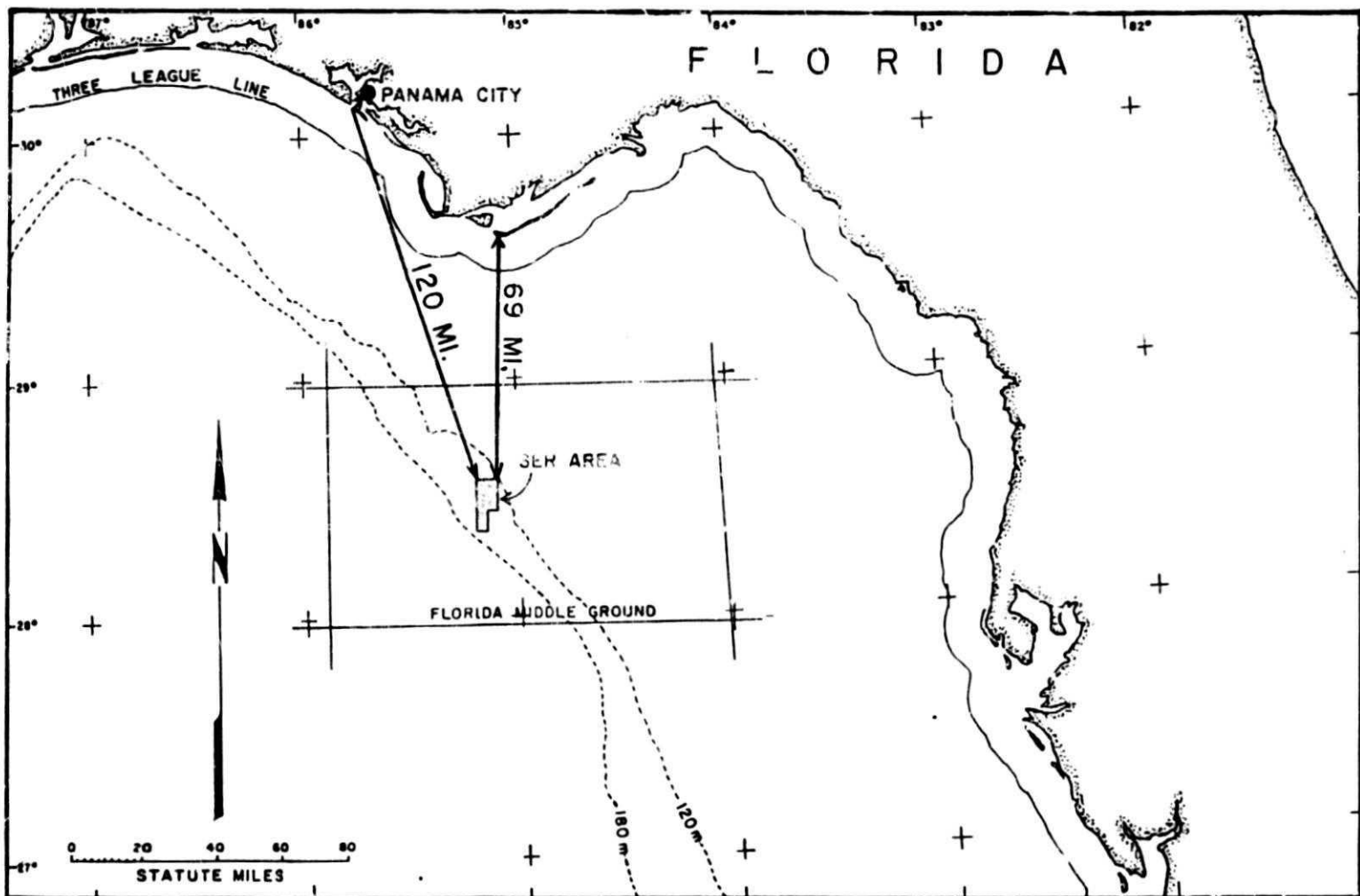
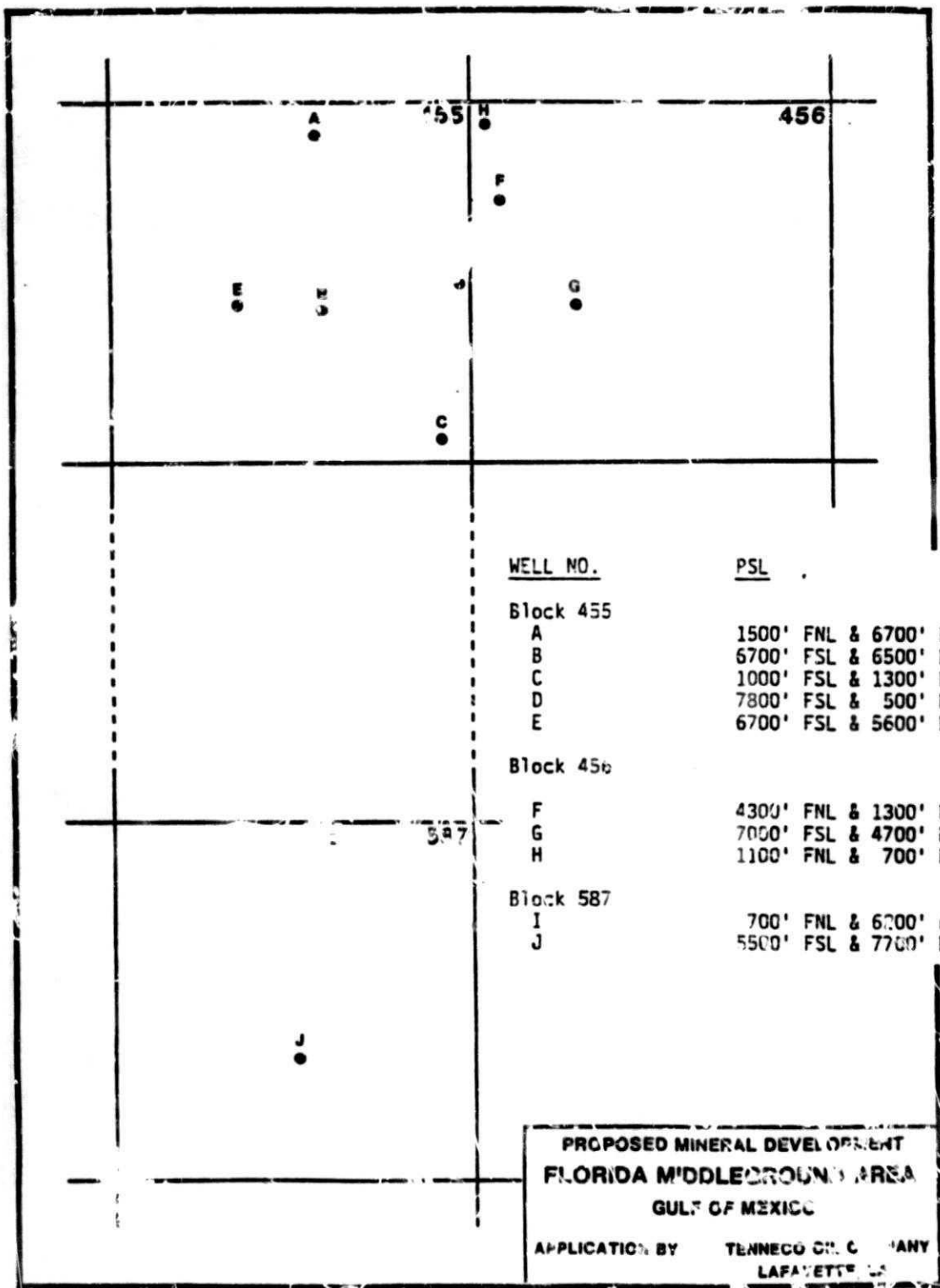


FIGURE I-1 GEOGRAPHIC LOCATION OF THE SER AREA.



WELL NO.	PSL
Block 455	
A	1500' FNL & 6700' FEL
B	6700' FSL & 6500' FEL
C	1000' FSL & 1300' FEL
D	7800' FSL & 500' FEL
E	6700' FSL & 5600' FNL
Block 456	
F	4300' FNL & 1300' FNL
G	7000' FSL & 4700' FNL
H	1100' FNL & 700' FNL
Block 587	
I	700' FNL & 6700' FEL
J	5500' FSL & 7700' FEL

PROPOSED MINERAL DEVELOPMENT
FLORIDA MIDDLEGROUND AREA
GULF OF MEXICO
 APPLICATION BY **TENNECO CO. COMPANY**
LAFAYETTE, LA

Figure I-2 Proposed Location Plan

From: Tenneco's PO:

C. SCHEDULE OF ACTIVITIES

Exploratory drilling is scheduled to begin in September, 1986, dependent upon rig availability. Indeed, because of requirements of the Air Force, drilling of the first well must commence before October 1, 1986, and all drilling operations must be completed by December 31, 1986. The proposed drilling schedule is 78 days for each well, for a total of 780 days if all ten wells are drilled. The wells may be drilled in any order, not necessarily consecutively, depending on the results of the first well. When drilling activity may resume after December 31, 1986 (should additional wells be required), is not known at this time.

D. TRANSPORTATION ROUTES

Onshore facilities supporting the planned offshore activity include boat and aircraft operations. Three vessels would service the exploratory activities. They would be based at an existing site in Panama City. A 50m (164 ft) supply boat would make approximately 30 trips per month to the lease area. A 35m (116 ft) vessel would stand by the rig for possible emergency evacuation and would make infrequent trips to shore (approximately one trip per month). A 27m (90 ft) crewboat would also stand by the rig site but would make one trip per week. The route followed by all vessels from the dock site to the lease area would cover approximately 133km (120 miles). Vessels would normally take the most direct route, weather and traffic conditions permitting.

A helicopter would transport personnel and small supplies from Panama City directly to the lease area. Approximately 7 round trip helicopter flights per week would take place. Helicopter traffic would follow the most direct route to the lease area, weather and traffic conditions permitting. Because the proposed action is exploratory, no onshore movement of oil and gas products would be involved.

E. PERSONNEL REQUIREMENTS

The operator estimates that 84 persons would be assigned to the drilling operation, of which 42 would be on the rig at any one time. These crews would work a 7-days-on/7-days-off schedule. A breakdown of these crews by job title for a typical submersible rig is given in Section VI.G. of the SER. Most of these employees would typically be assigned to the rig. Other personnel (casing crews, well loggers, and engineers) would be flown in as the need arises.

Four persons would man the onshore supply base at Panama City. These would be contract personnel. In addition to the staff employees at the onshore base, Tenneco would contract a local crane service and local unskilled labor as necessary. The number of locally-hired laborers would probably not exceed four or five at any one time.

Twelve personnel would be required to operate the three vessels at any one time during normal operations. The vessel crews would accompany their respective boats when they move to the site from another area of the Gulf. They would usually reside on their respective vessel.

Two pilots, two mechanics, and a dispatcher would operate the helicopter on a 7-days-on/7 days off basis.

F. TECHNOLOGY

No new or unusual technology would be employed in the implementation of the proposed action.

G. CONTINGENCY PLANS

Tenneco has on file a detailed contingency plan for Drilling Operations in a Hydrogen Sulfide Environment, pursuant to OCS Order No. 2. The plan outlines specific safety precautions that shall be followed and identifies the safety equipment that shall be located on the rig. Since karst topography is expected to be encountered during the drilling operation, H₂S sensors will be installed to be operational prior to reaching the expected depth of the karst.

In accordance with OCS Order No. 7, Tenneco has filed a detailed Oil Spill Contingency Plan for alert, reporting, and cleanup procedures for oil spills or spills of hazardous materials. Response to a spill of oil or other hydrocarbons in Florida waters would be in full accordance with all State and Federal laws and regulations as well as Tenneco's own policy. A Clean Gulf Associates (CGA) Fast Response Unit (FRU) is proposed to be located in Panama City. Response time from Panama City would be 24 hours. Equipment in Panama City would include, at a minimum, a fast response unit, a boat spray system for dispersants, and dispersant storage. If needed, additional CGA equipment would be available at CGA's bases in Alabama, Louisiana, and Texas. Solid and liquid wastes from a spill, including oil-contaminated debris, would be disposed of in accordance with applicable regulations. Operations would be in accordance with all applicable OCS Orders, Notices to Lessees and Operator's (NLTs), and Lease Stipulations. Refer to Tenneco's POE, SER, and Oil Spill Contingency Plan for additional details.

H. DISCHARGES AND EMISSIONS

1. General

Solid, liquid, and gaseous discharges would be generated by offshore and onshore activities and transportation operations resulting from the proposed POE. At the drill site all discharges to the ocean would be under a National Pollutant Discharge Elimination System (NPDES) permit issued by the U.S. Environmental Protection Agency (USEPA).

2. Solid Wastes

The bulk of the solid wastes discharged from the drilling rig during the exploration phase consists of drilling cuttings and drilling muds. The total amount of solids in the drilling cuttings that would be discharged during the exploration phase would be approximately 39,000 barrels. The total amount of drilling muds would be approximately 23,400 barrels. The ultimate quantity of such discharges would be dependent upon the actual number of wells drilled as a result of this proposal.

All drilling cuttings generated at the drill bit would be brought to the surface by the drilling mud. Once at the surface, the cuttings would be separated from the mud by shakers and centrifugal separators prior to being discharged overboard. Section 2.K.1 gives a discussion of the types and disposal of drilling muds.

In addition to the drilling fluids that are generated and discharged offshore, solid wastes include mud sacks, plastic, cloth, food scraps, and metal. All of these wastes, except for the metal, would be collected in metal trash containers and transported to shore for disposal at approved disposal facilities. Scrap metal, casing and thread protectors, used drilling bits, and other metal wastes would be either reused or sold as scrap.

Solid wastes generated at the supply base would be variable depending on a variety of factors including the level of drilling activity, the number of cargo boats operating and their travel frequencies, and the number of supply base personnel. These wastes, consisting primarily of packing materials, containers, clothes, drums, cables, spools, and domestic refuse, would be recycled or reclaimed. The remaining material would be delivered to an approved disposal facility onshore. Any solid wastes containing oil would be delivered to an approved disposal facility.

3. Liquid Wastes

Treatment of liquid waste effluents would be in compliance with the NPDES permit. The estimated daily quantity, content, and description of the discharges are given in Section 2.K.11 of the SER.

4. Gaseous Wastes

The POE indicates that ten wells may be drilled in approximately 780 days in the Blocks. Gaseous pollutants that could be generated from the onshore and offshore operations during the exploratory drilling would come from supply boats; standby boats; helicopters; trucks; dock equipment such as a crane; and the drilling vessel's power generators, compressors, and pumps. The total emissions expected are given in Section 2.K.111 of the SER.

The operator states that the above emissions were calculated using the factors from the USEPA, publication: AP-42, "Compilation of Air Pollutant Emission Factors".

Offshore emissions from service vessel traffic would be widely dispersed along the travel routes. Panama City is an established port facility. No new construction is anticipated. The only potential addition to the existing facility would be a temporary structure (e.g., trailer) moved into the base area to serve as an office and living quarters for onshore support.

I. STATE CERTIFICATION

The State of Florida does have an approved Coastal Zone Management (CZM) Program; therefore, a Certificate of Coastal Zone Consistency is required for the proposed activities. In accordance with the requirements outlined in 15 CFR 930, Tenneco submitted their State of Florida Coastal Management Consistency Certification and Findings of the Consistency Assessment to MMS on July 23, 1986. The operator's POE and SER were submitted to the Office of the Governor, State of Florida, and the Federal coordinator for Florida's CZM Program in accordance with 30 CFR 250.34. Correspondence resulting from this coordination is contained in Appendix C. CZM comments were not available prior to the plan approval date. Refer to Section V, Consultation and Coordination.

J. MEASURES FOR COMPLIANCE

Monitoring programs would include those required by OCS Orders, NTL's, and applicable regulations. These regulations provide for training of employees and the design, installation, operation, and maintenance of equipment in a manner which conserves and protects other resources or activities. Inspections are conducted regularly by MMS personnel to enforce all OCS Orders and Regulations, NTL's, etc. Monitoring programs for detection and control of oil and hazardous waste spills have been addressed in Section I.G. Action to be taken by Tenneco to limit pollution effects are contained in the POE and SER. The discharges from the drilling rig would be monitored as required by the USEPA NPDES Permit. The operator states that full compliance with the NPDES permit and Lease Stipulations during all drilling activities in the Blocks would be maintained.

K. NEARBY PENDING ACTIONS

A listing of relinquished or expired leases and active leases is provided in the AEA. At the present time, this POE is the only pending action in the Florida Middle Ground Area.

II. ALTERNATIVES TO PROPOSED ACTION

Alternatives to approval of the proposal as originally submitted are:
Nonapproval of the proposal - Tenneco would not be allowed to undertake the proposed exploration activities in the Blocks. This alternative could prevent discovery and development of needed hydrocarbon resources and would result in loss of royalty income for the United States. Considering this aspect and the fact that minimal impacts are anticipated, this alternative was not deemed appropriate.

Approval with additional mitigation - In the course of this evaluation process, the following protective measures were identified to further mitigate the environmental impacts associated with the proposal:

1. In compliance with the lease stipulation regarding control of electromagnetic emissions and operations of boat and/or aircraft traffic into the designated military warning area W-151, the operator must enter into an agreement with the Commander, Armament Division, Attention: Howard Dimmig/CCN, Eglin AFB, Florida 32542, Telephone: (904) 882-5558.

2. Due to the possibility of H₂S gas being present when drilling through karst topography, H₂S sensors should be installed and operational prior to drilling through the karst.

3. Permits cannot be issued until the State determines the proposal is consistent with its CZM program or concurrence can be conclusively presumed. Upon receipt of the State CZM consistency concurrence, the SEA document may be amended accordingly.

In addition to these measures, appropriate OCS Orders, regulations, and procedures are believed sufficient to prevent significant adverse impacts. Measures which Tenneco proposes to implement to limit pollution effects are discussed in the plan, SER, and AEA. Outer Continental Shelf Orders, NTL's, and Lease Stipulations Nos. 1, 4, and 5 were identified throughout this assessment as

existing mitigation for potential environmental impacts associated with the proposed POE.

III. DESCRIPTION OF THE AFFECTED ENVIRONMENT

Refer to Section III of the AEA for information applicable to this section of the SEA. Additional description of the affected environment may be found in the REIS and the EIS for Sales 94, 98, and 102.

IV. ENVIRONMENTAL CONSEQUENCES

A. OIL SPILLS

1. Oil Spill Accidents

A complete discussion of the causes of both major and minor oil spills resulting from exploration activity in the Gulf of Mexico is included in Section IV.A.1. of the AEA.

2. Vulnerability of Coastal Land Segments to Oil Spills

A summary of the trajectory analysis (for 10 days) simulated as a part of the Oil Spill Risk Analysis is presented in Table IV.4. of the AEA. Refer to Section IV.A.2. of the AEA for background information concerning these hypothetical oil spill trajectories.

Florida Middle Ground Blocks 455 and 456 fall within the oil spill area 104, while Block 587 falls within area 103 (see Figure IV-1 of the AEA). The chances that an oil spill occurring in these areas would contact land along the Florida coast would be less than 0.5 percent. It is doubtful that any coastal areas would be impacted by oil spills occurring in these Blocks. Refer to Section IV.B.4.d of the FEIS for Lease Sales 94, 98, and 102 for a discussion of factors affecting the severity of an oil spill.

The prospect of there being an oil spill is guarded against through utilization of state-of-the-art drilling and blowout prevention equipment and through the use of best possible drilling practices by thoroughly trained personnel. These safeguards would be reinforced by operations curtailment programs enforced whenever sea state and weather conditions require. In the unexpected event that an accidental oil spill should occur, Tenneco would conduct an emergency response to contain and clean up the spilled oil. Solid wastes from a spill would be disposed of in an approved landfill area. General resource mobilization and response plans are outlined in Tenneco's approved Oil Spill Contingency Plan for the Gulf of Mexico, along with the CGA spill plan.

In summary, the risk due to the proposed activity appears very remote. Most spills would be naturally dispersed within 60 days. In addition, most spills would be subjected to containment and cleanup efforts. The operator is a member of CGA which has spill containment and cleaning equipment strategically located along the Gulf Coast. Details of Tenneco's alert, reporting, and cleanup procedures are contained in the SER. In addition, MMS conducts reviews of the various applications for compliance with OCS Orders, NTL's, etc., to insure safe drilling operations. A description of the BOP equipment and diverter system is contained in the SER.

3. Effects of Oil Spills on the Environment

Refer to Section IV.A.4 of the AEA for discussions of oil spill impacts to coastal habitats, benthic communities, endangered or threatened species, other wildlife including migratory waterfowl, commercial fishing, recreation/tourism, cultural resources, water quality, and air quality.

Due to distance from shore [111km (69 mi)] and the water depth [122 to 174m (400 to 571 ft)], existing measures, regulations, and cleanup procedures outlined in Section IV.A.2 should be sufficient to effectively mitigate any potential oil spill impact on the environment to an insignificant level.

B. ENVIRONMENTAL IMPACTS OF THE PROPOSED ACTION

1. Impacts Concerning Geology

Florida Middle Ground Blocks 455, 456, and 587 lie approximately 111km (69 mi) from shore in water depths ranging from 122m (400 ft) to 174m (571 ft) across the surveyed areas (Figure I-3). The seafloor within Blocks 455, 456 and 587 is relatively smooth, dips uniformly in a southwesterly direction from 410 ft (122m) to 517 ft (158m) in Blocks 456/457 and from 524 ft (160m) to 571 ft (174m) in Block 587, and is devoid of major topographic features. The major relief feature on the shelf is the Florida Middle Ground reef complex approximately 43 statute miles east and shoreward of the SER area. These Blocks lie within a transition zone between the West Florida Lime Mud Facies and the West Florida Sand Sheet. Surficial sediments are predominantly silty sand. Remote sensing data also indicate an unconsolidated silty sand surficial cover underlain by a sand sequence in Blocks 455, 456 and 587. The thickness of the unconsolidated sediment ranges from 8 to 13 ft in Blocks 455 and 456, and from 7 to 11 ft in Block 587. Remote sensing data indicate the presence of seafloor depressions, areas of seafloor textural changes, sand waves and apparent anchor drag scars. Seafloor depressions range in size from a few feet to 25 ft across. They are scattered throughout Blocks 455 and 456 but concentrated along the northern boundary of Block 587. Seafloor textural changes in Blocks 455 and 456 are interpreted as sand patches as compared to the predominantly silty sand substrate in these blocks. Zones of apparent small sand waves were observed in the southern portion of Block 587. Elongated features indicative of apparent anchor drag scars are noted in the northeast corner of Block 587.

Gas may be venting from the shallow sediments into the water column at two small isolated locations. One such location is in the western portion of the northern border of Block 456. The other area is actually in the northern portion of the border separating Blocks 499 and 500. Remote sensing data suggest the gas is venting from the upper part of the sand sequence, through the silty sand surficial cover to the seafloor; and the data do not suggest a deeper source of gas. These do not represent geohazards, although the cohesive shear strengths of the silty sands at these two locations may be lower than those in the adjacent sediments.

In the review of the geophysical data performed by the MMS District Office (Appendix B), karst topography was noted at about a depth of 7,000-8,000 feet. Since H₂S gas is often associated with karst, it is recommended that Tenneco have H₂S Sensors in place and operational prior to reaching that depth.

2. Impacts Concerning Meteorology

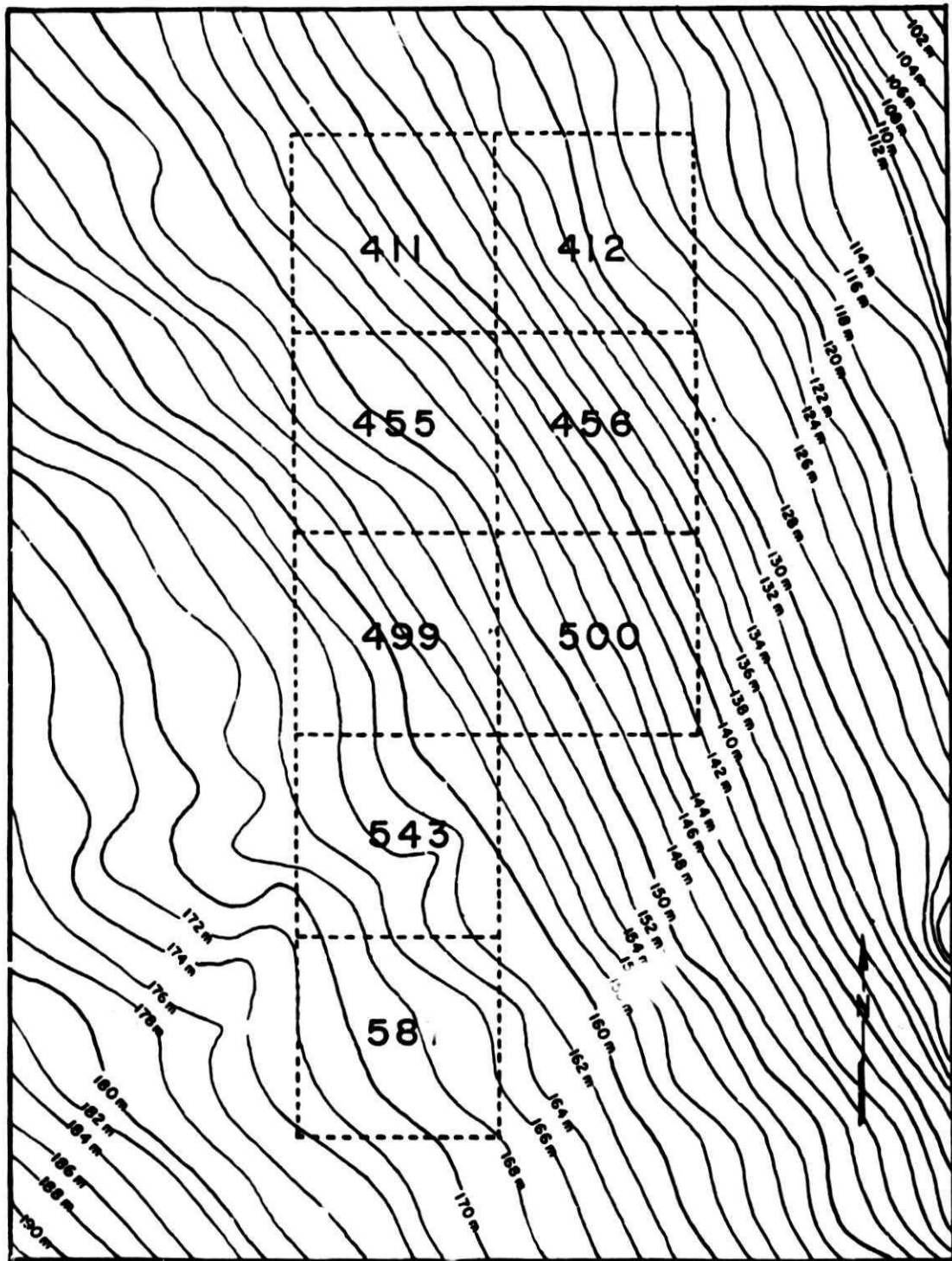


FIGURE 1-3 BATHYMETRY OF THE SER AREA.

Mitigation to be taken by Tenneco during hurricanes is discussed in Section IV.B.3 of this SEA. In conditions of high winds and reduced visibility due to fog or rain, helicopter traffic and/or boat traffic between the rig and shorebase would be temporarily suspended.

Interferences due to weather conditions are expected to be short-term and infrequent, producing only an insignificant effect on the movement of supplies and personnel to and from the facilities. The effect on offshore operations should be minimal.

3. Impacts Concerning Physical Oceanography

Oceanographic conditions which could adversely affect the operation have been taken into consideration during the planning and designing of the proposed action. However, although drilling rigs are designed to operate in rough sea conditions, precautions would be taken by Tenneco if a hurricane approached these Blocks. Activities would be halted, protective measures taken, and facilities secured. No significant impacts from normal physical oceanographic conditions would be expected during the implementation of this exploration plan.

4. Impacts on the Biological Environment

Further site-specific discussions of potential impacts to the benthos and sensitive underwater features are included under their respective headings. Refer to Section IV.A.4 of the AEA for a discussion of oil spill impacts to the biological environment.

a. Impacts on Coastal Habitats

Due to the distance of these Blocks from shore and the use of an established onshore support base requiring no new construction, dredging, or filling, impacts other than those from oil spills on the area's biological environment would be insignificant.

b. Impacts on Offshore Habitats

(1) Impacts on the Pelagic Environment

Additional information is included in this section of the AEA.

(2) Impacts on the Benthic Environment

Impacts to the benthic environment are generally discussed in Sections IV.B.2.b.2 and 3 of the AEA. No further impacts resulting from the proposed activity are expected.

(3) Impacts on Sensitive Underwater Features

Live-bottom areas have been determined by the MMS to be worthy of protection by lease stipulation. Because the water depth is greater than 100m, no Live Bottom Survey is required by the stipulation. There is no other evidence that such areas are present in these Blocks.

c. Impacts on Endangered or Threatened Species

See Sections III.B.3 and I'.B.2.c of the AEA for a discussion of endangered species and the impacts of the OCS program on endangered species. The operator has stated that the shorebase will be located in Panama City, which is not within the range occupied by the Florida manatee.

d. Impacts on Breeding Habitats and Migration Routes

Additional information is included in this section of the AEA.

e. Impacts on Protected Areas of Biological Concern

Additional information is included in this section of the AEA.

C. IMPACTS ON SOCIOECONOMIC CONDITIONS AND CONCERNS

Refer to Section IV.C of the AEA for additional information.

1. Impacts to Economic and Demographic Conditions

a. Impacts on Local Employment

A discussion of local employment in and around Panama City is contained in the AEA, Section 4.C.1. The demand for local labor would probably be limited to unskilled labor and crane operators. They would be hired as necessary and the number would probably not exceed four or five at any one time. Due to the low number of employees that would be hired locally, impacts on local employment would be insignificant.

b. Impacts on Local Population and Industry Centers

Tenneco does not anticipate permanently relocating any employees and their families to the Panama City area as a result of the proposed exploratory drilling activity. Two supply base personnel would be temporarily housed at a local motel or in a trailer located at the onshore base. At the end of their tour of duty, these employees would return home. These vessel crews required to operate the supply and standby vessels would usually accompany their respective vessels when they move to the site from another area of the Gulf. These transient personnel would not require local housing, because they would live on the vessel and would return to their residences upon completion of each tour of duty. The helicopter pilots and mechanics manning the air terminal would be housed in a local motel while on duty and would return to their residences during their days off. Most of the employees required to operate the drilling rig would typically be assigned to the rig. They would stay with the rig while on duty and return to their home while off duty. Expansion of existing facilities to support the offshore and onshore activities is not expected because there would be little incentive on the part of industry to establish extensive facilities prior to the proven existence of commercial quantities of hydrocarbons.

2. Impacts on Land Use

a. Impacts of Increased Demands on Community Services

A discussion of the community services available in and around the Panama City area is contained in Section IV.C.2 of the AEA.

Increased demands on community service would be insignificant. No new families would move into the area and the occasional demands of transient employees per drilling operation on local services would be insignificant.

b. Impacts of Increased Boat and Air Traffic

A discussion of the existing transportation systems is contained in Section 4.C.2.b of the AEA. Tenneco would utilize one supply boat, one standby vessel, a crewboat, and one helicopter to service the activities. The vessels would be docked at existing facilities in Panama City. The helicopter would be based at the Panama City Airport. The supply boat would make approximately 30 round trips per month, the crewboat would make about one trip per week, and the helicopter would make approximately 7 round trips per week. All transportation craft would follow the most direct route to the rig. This additional traffic is not expected to significantly impact existing traffic. The onshore facilities are also not expected to be adversely impacted.

c. Impacts of Competition for Scarce Coastal Resources and Demands for Goods and Services

A discussion of the supply or existence coastal resources is contained in Section IV.C.2.c of the AEA. Tenneco would use an onshore support base located at Panama City for activities in the Blocks. No new land areas are expected to be occupied and no increased demands on existing dock space are anticipated. Additionally, only one helicopter would be utilized.

(1) Supplies and Equipment

Significant amounts of commodities to be purchased would include materials specialized for well drilling, electricity, and groceries. Major supplies and equipment needed for the proposed drilling activities per well in the Blocks are given in the AER.

Demands on typical local services and materials would be periodic and relatively small. These demands would not be expected to affect supplies in the area of the onshore base significantly.

(2) Water

Approximately 30,000 GPD of freshwater would be required during the proposed activities in the Blocks. The desalination unit aboard the drilling rig would provide 10,000 GPD. Approximately 20,000 GPD of freshwater would be required for the drilling rig from sources onshore.

Drilling operations demand on the local water system's capacity would not be significant.

(3) Aggregate Energy

Approximately 176,000 gallons of diesel and 6,000 gallons of jet fuel will be purchased each month from local distributors. Present supplies in the area are adequate to handle the demand. The only use of electricity anticipated is that for office space. The rate of consumption should not exceed 6,000kw per

month. The impact on local supplies from this use would be insignificant. These estimates are based on the requirements for one drilling rig.

(4) Other Resources

Other services and materials that may be needed to support offshore exploratory drilling are listed in Table III-12 of the AEA. Additional details of the types of vendors/contractors and specific demands for goods and services which could be required to conduct the planned activities are discussed in the SER.

3. Impacts from Construction of Onshore Support Facilities

Helicopter operations would originate from the Panama City Airport. The onshore support facility for marine operations would be an existing site in the Panama City area. Refer to Sections I.B and I.D of this SEA for additional information. The supply terminal and helicopter base would both utilize existing facilities. No new construction, dredging, or filling would be involved. The proposed temporary structure (e.g., trailer) would utilize existing facilities. The onshore base would be expected to have an insignificant impact on the Panama City area.

4. Impact of Public Opinion

No significant public opposition to the planned operation has surfaced to date.

5. Impacts on Navigation

Exploratory activities in the Blocks should have an insignificant effect on shipping. The Blocks are located 111km (69 mi) offshore and outside of any major shipping lanes or anchorage areas in the Gulf of Mexico. Marine traffic in support of the proposed activities is not expected to significantly affect shipping activities in the Panama City area because of the established port facilities already in existence and the temporary nature of the proposed activities. The impacts of the drilling rig on marine transportation (fishing and pleasure boating) could be both adverse and beneficial, because stationary structures could represent obstacles to navigation, but they also could serve as navigational aids. The operator is required to comply with U.S. Coast Guard regulations related to the safety of personnel and the display of prescribed navigational lights and signals for the safety of navigation. Tenneco is also required to obtain permits from the U.S. Army Corps of Engineers to prevent obstructions to navigation.

6. Impacts Concerning Military Use

These Blocks are located within Military Warning Area W-151. In compliance with the lease stipulation regarding control of electromagnetic emissions and operation of boat and/or air traffic into the designated Military Warning Area W-151, the operator must enter into an agreement with the Commander Armament Division, Attention: Howard Dimmig/CCN, Eglin AFB, Florida 32542, Telephone: (904) 882-5558. Military operations within these areas vary in types of missions and can include missile testing and research, rocket firing, air-to-air operations, and air-to-surface operations. Due to the concentration of military

activity, there is a possibility of unexploded ordnance located within the SEA area. The operator will comply with NTL 83-3 as a precaution against this possibility. Magnetic anomalies between 300 and 500 gammas were detected within one region in the southwest corner of Block 455, and it is suggested that this area be avoided as a site for drilling since the cause of such anomalies is not apparent. No drilling activities are presently contemplated in the southwest corner of Block 455. Magnetic anomalies detected in other areas within Blocks 455, 456 and 587 show intensities less than 7 gammas, and none represents hazards or constraints to drilling or construction operations.

No objections to approval of the proposed activity were received from the Department of the Air Force, Headquarters Armament Division, Eglin Air Force Base, Florida, provided that drilling operations be completed by December 31, 1986 (see Appendix C). Conducting the exploratory operations in accordance with existing Stipulation No. 3 and NTL 83-3 is expected to reduce potential impacts to an insignificant level.

7. Impacts on Commercial Fishing

Direct effects of exploratory operations on commercial fishing in these Blocks would be the removal of a limited area of seafloor from use and the temporary degradation of water quality at the immediate area of each drill site. Although some commercial fishing would be likely to occur within the vicinity of these Blocks, no significant conflict of use is expected to develop in the area of the proposed action due to the distance from shore. Refer to Section IV.A of the AEA for a discussion of oil spill impacts to commercial fishing.

8. Impacts on Recreation/Tourism

Due to the distance offshore and the temporary nature of the proposed activities, impacts to the aesthetics and recreational resources of the coastal area would be insignificant. Refer to Section IV.A of the AEA for a discussion of oil spill impacts to recreation/tourism.

9. Impacts on Cultural Resources

These Blocks lie outside the lines of high probability for the occurrence of historic and prehistoric cultural resources. No evidence of known or potential cultural resources exists in the blocks. Therefore, no impacts to offshore cultural resources are expected. The operator states that existing onshore support facilities would be utilized; therefore, no impacts to onshore cultural resources are anticipated. Stipulation No. 1 provides further safeguards for the protection of presently unknown cultural resources. The operator is required to report, upon discovery of any site, structure or object of historical or archaeological significance, to the ORD, MMS, GOM and make every reasonable effort to preserve and protect that cultural resource.

10. Impacts on Water Quality

According to Tenneco's SER, the total amount of drilling cuttings that would be discharged during the exploration activity is estimated at approximately 3,900 barrels of solids per well. Drilling mud discharges would total approximately 2,340 barrels of solids per well. Liquid and solid wastes from the activities would temporarily degrade the water quality in the immediate vicinity of the wells in these Blocks.

Implementation of the proposed activity would alter the water quality by resuspension of bottom sediments during placement of the drilling rig and the discharge of drill cuttings and muds and other liquid wastes. Rig installation has the potential to disperse pollutants entrapped in the bottom sediments into the water column and create a turbidity plume. These activities would be of short duration and any pollutants would be rapidly dispersed over the block under consideration. At most depths typical of the continental shelf the majority of discharged fluids and cuttings are initially deposited on the seabed within 1,000m (3,281 ft) of the point of discharge. This material may persist as initially deposited or may undergo rapid or prolonged dispersion, depending on the energy of the bottom boundary layer.

Because water quality is expected to quickly return to normal in the area after drilling operations have been completed, no significant impacts to the water quality of the area are expected as a result of the proposed activities. All discharges would adhere to the standards imposed by the NPDES Permit. Refer to Section IV.A of the AEA for a discussion of oil spill impacts to water quality.

11. Impacts on Air Quality

Onshore - The effects of the air emissions onshore would be negligible due to the distance of the drill sites to the west Florida coast. The percent increases in ambient concentrations contributed by the onshore secondary emissions from the proposed activities would be insignificant.

Offshore - Data presented in the operator's SER (see also Appendix B) indicate that the total emissions expected from the proposed activities in these Blocks would be well below the calculated exemption levels, qualifying these activities for exemption from further air quality review. The site-specific air quality review conducted by MMS as a part of this environmental analysis concluded that there could be no significant effect on air quality from the proposed action.

12. Impacts on Other Commercial Uses

There are no other commercial uses in these Blocks to be affected by the exploration activity.

13. Impacts on Other Mineral Uses

There are no plans or proposals for mining other mineral resources other than oil and gas in these Blocks; therefore, no conflict of use is expected.

14. Impacts Concerning Pipelines and Cables

No conflict of use is expected because there are no known existing pipelines in the eastern Gulf and because pipelines cannot be proposed as a part of this exploration activity (Appendix B).

15. Impacts of Ocean Dumping

No conflict of use is expected because there are no existing ocean dumping areas designated in the eastern Gulf. The operator has stated that compliance with the USEPA NPDES permit would be maintained. Additionally, OCS Order No. 8

requires that the operator locate and retrieve any large debris lost overboard as a result of the proposed activities.

D. UNAVOIDABLE ADVERSE IMPACTS

Information in this section is included in the AEA.

V. CONSULTATION AND COORDINATION

In accordance with provisions of 30 CFR 250.34 and DM 655, and the Memorandum of Agreement (1983) between the Department of Defense and the Department of the Interior, copies of the plan were forwarded to the U.S. Fish and Wildlife Service, the National Marine Fisheries Service, the State of Florida, and the Commander, Armament Division, Eglin Air Force Base, Florida. Copies of the comments of these agencies are included in Appendix C. No objections to the provisions of this POE were raised by any of these agencies.

VI. BIBLIOGRAPHY

- Alpine Ocean Geophysics. High resolution geophysical survey report, Gulf of Mexico, Florida Middle Ground, Blocks 455 and 456, OCS-G 8363 and 8364. Prepared for Tenneco Oil Company. 1986a.
- Alpine Ocean Geophysics. High resolution geophysical survey report, Gulf of Mexico, Florida Middle Ground, Block 587, OCS-G 8368. Prepared for Tenneco Oil Company. 1986b.
- Coastal Environments, Inc. (CEI). Cultural Resources Evaluation of the Northern Gulf of Mexico Continental Shelf, U. S. Department of the Interior, National Park Service. 1977.
- National Research Council. Drilling Discharges in the Marine Environment. Washington, DC: National Academy Press. 1983.
- Racal Survey, Inc. Site-Specific Environmental Report, Florida Middle Ground Blocks 411, 412, 455, 456, 499, 500, 543, 587. Prepared for Tenneco Oil Company. Houston, TX. 1986.
- Tenneco Oil Exploration and Production. Plan of Exploration. Florida Middle Ground Area, Blocks 411, 412, 455, 456, 499, 500, 543, 587, Leases OCS-G 8361 through 8368. Lafayette, LA. 1986.
- U. S. Department of the Interior. Minerals Management Service. Final Environmental Impact Statement. Proposed OCS Oil and Gas Lease Sales 94, 9P and 102 (Central, Western and Eastern Gulf of Mexico). Washington, DC: Available from NTIS, Springfield, VA. 1984.
- U. S. Department of the Interior. Minerals Management Service. Area Wide Environmental Assessment, Exploration Activities, Northeast Section of Eastern Planning Area, Gulf of Mexico Region. Metairie, LA. 1985.

VII. PREPARERS

Author

Charles Hill - Biologist

Typists

Cynthia Nicholson - Clerk-Typist

Gayle Weiser - Secretary

VIII. APPENDICES
APPENDIX A LEASE STIPULATIONS
APPENDIX B REVIEWS FROM MMS
APPENDIX C REVIEWS FROM OTHER AGENCIES

APPENDIX A LEASE STIPULATIONS

Appendix A Lease Stipulations

The following lease stipulations were included in the Final Notice of Sale for Sale 94. It should be noted that only stipulations 1, 3, 4, and 5 apply to activities proposed by Tenneco under this POE. Stipulation 2 will apply if development and production activities subsequently occur. For completeness, the "Information to Lessees" Section of the Final Notice of Sale is also reproduced here.

Stipulation No. 1--Protection of Archaeological Resources.

(This stipulation will apply to all blocks offered for lease in this sale.)

(a) "Archaeological resource" means any prehistoric or historic district, site, building, structure, or object (including shipwrecks); such term includes artifacts, records, and remains which are related to such a district, site, building, structure, or object. (Section 301(5), National Historic Preservation Act, as amended, 16 U.S.C. 470w(5)). "Operations" means any drilling, mining, or construction or placement of any structure for exploration, development, or production of the lease.

(b) If the Regional Director (RD) believes an archaeological resource may exist in the lease area, the RD will notify the lessee in writing. The lessee shall then comply with subparagraphs (1) through (3).

(1) Prior to commencing any operations, the lessee shall prepare a report, as specified by the RD, to determine the potential existence of any archaeological resource that may be affected by operations. The report, prepared by an archaeologist and a geophysicist, shall be based on an assessment of data from remote-sensing surveys and of other pertinent archaeological and environmental information. The lessee shall submit this report to the RD for review.

(2) If the evidence suggests that an archaeological resource may be present, the lessee shall either:

(i) Locate the site of any operation so as not to adversely affect the area where the archaeological resource may be; or

(ii) Establish to the satisfaction of the RD that an archaeological resource does not exist or will not be adversely affected by operations. This shall be done by further archaeological investigation, conducted by an archaeologist and a geophysicist, using survey equipment and techniques deemed necessary by the RD. A report on the investigation shall be submitted to the RD for review.

(3) If the RD determines that an archaeological resource is likely to be present in the lease area and may be adversely affected by operations, the RD will notify the lessee immediately. The lessee shall take no action that may adversely affect the archaeological resource until the RD has told the lessee how to protect it.

(c) If the lessee discovers any archaeological resource while conducting operations in the lease area, the lessee shall report the discovery immediately to the RD. The lessee shall make every reasonable effort to preserve the archaeological resource until the RD has told the lessee how to protect it.

Stipulation No. 2--Live Bottom Areas.

(This stipulation will apply only to leases on blocks in water depths of 200 meters or less. For activities conducted under Plans of Exploration, the provisions of this stipulation shall apply only in water depths of 100 meters or less. For activities conducted under Development and Production Plans, the provisions of this stipulation shall apply in water depths of 200 meters or less.)

Prior to any drilling activity or the construction or placement of any structure for exploration or development on this lease including, but not limited to, well drilling and pipeline and platform placement, the lessee will submit to the Regional Director (RD) a bathymetry map prepared utilizing remote sensing and/or other survey techniques. This map will include interpretations for the presence of live bottom areas within a minimum of 1,820 meters radius of a proposed exploration or production activity site.

For the purpose of this stipulation, "live bottom areas" are defined as seagrass communities; or those areas which contain biological assemblages consisting of such sessile invertebrates as sea fans, sea whips, hydroids, anemones, ascidians, sponges, bryozoans, or corals living upon and attached to naturally occurring hard or rocky formations with rough, broken, or smooth topography; or areas whose lithotope favors the accumulation of turtles, fishes, and other fauna.

The lessee will also submit to the RD photodocumentation of the sea bottom within 1,820 meters of the proposed exploration drilling sites or proposed platform locations.

If it is determined that the live bottom areas might be adversely impacted by the proposed activity, then the RD will require the lessee to undertake any measure deemed economically, environmentally, and technically feasible to protect live bottom areas. These measures may include, but are not limited to, the following:

- (a) the relocation of operations to avoid live bottom areas;
- (b) the shunting of all drilling fluids and cuttings in such a manner as to avoid live bottom areas;
- (c) the transportation of drilling fluids and cuttings to approved disposal sites; and
- (d) the monitoring of live bottom areas to assess the adequacy of any mitigation measures taken and the impact of lessee initiated activities.

Stipulation No. 3--Military Warning Areas.

(This stipulation will be included in leases located within warning areas and Eglin Water Test Areas as shown on map 1 described in paragraph 12).

(a) Hold harmless

Whether compensation for such damage or injury might be due under a theory of strict or absolute liability or otherwise, the lessee assumes all risks of damage or injury to persons or property which occur in, on, or above the Outer Continental Shelf (OCS), to any persons or to any property of any person or persons who are agents, employees, or invitees of the lessee, his agents, independent contractors, or subcontractors doing business with the lessee in connection with any activities being performed by the lessee in, on, or above the OCS, if such injury or damage to such person or property occurs by reason of the activities of any agency of the U.S. Government, its contractors or subcontractors, or any of their officers, agents, or employees, being conducted as a part of, or in connection with, the programs and activities of the command headquarters listed in the table below.

Notwithstanding any limitation of the lessee's liability in section 14 of the lease, the lessee assumes this risk whether such injury or damage is caused in whole or in part by any act or omission, regardless of negligence or fault, of the United States, its contractors or subcontractors, or any of its officers, agents, or employees. The lessee further agrees to indemnify and save harmless the United States against all claims for loss, damage, or injury sustained by the lessee and to indemnify and save harmless the United States against all claims for loss, damage, or injury sustained by the agents, employees, or invitees of the lessee, his agents, or any independent contractors or subcontractors doing business with the lessee in connection with the programs and activities of the military installations referenced below, whether the same be caused in whole or in part by the negligence or fault of the United States, its contractors or subcontractors, or any of its officers, agents, or employees and whether such claims might be sustained under a theory of strict or absolute liability or otherwise.

(b) Electromagnetic Emissions

The lessee agrees to control his own electromagnetic emissions and those of his agents, employees, invitees, independent contractors, or subcontractors, emanating from individual designated Department of Defense (DOD) warning areas in accordance with requirements specified by the commander of the command headquarters listed in the following table to the degree necessary to prevent damage to, or unacceptable interference with DOD flight, testing, or operational activities, conducted within individual designated warning areas. Necessary monitoring control and coordination with the lessee, his agents, employees, invitees, independent contractors or subcontractors will be effected by the commander of the appropriate onshore military installation conducting operations in the particular warning area; provided, however, that control of such electromagnetic emissions shall in no instance prohibit all manner of electro-

magnetic communication during any period of time between a lessee, his agents, employees, invitees, independent contractors, or subcontractors, and onshore facilities.

(c) Operational Controls

The lessee, when operating or causing to be operated on his behalf boat or aircraft traffic in the individual designated warning area, shall enter into an agreement with the commander of the individual command headquarters listed in the following table, on utilizing an individual designated warning area prior to commencing such traffic. Such an agreement will provide for positive control of boats and aircraft operating in the warning areas at all times.

Warning Areas' Command Headquarters
Eastern Planning Area

Warning Areas	Command Headquarters	Remarks
W-151	Commander Armament Division Eglin AFB, Florida	Overall Operational Control
W-151	Commander Naval Coastal System Center Code 30 Panama City, Florida	Periodic Testing Stand Down
W-155	Naval Air Training Command Training Wing Six Naval Air Station Pensacola, Florida	Overall Operational Control
W-163	Commander Armament Division Eglin AFB, Florida	Overall Operational Control
W-174	Naval Air Training Command Naval Air Station Key West, Florida	Overall Operational Control
W-470	Commander Armament Division Eglin AFB, Florida	Overall Operational Control
Eglin Water Test Areas 1, 2, 3, 4, and 5	Commander Armament Division Eglin AFB, Florida	Overall Operational Control

(d) Evacuation

(The following clause will apply to Warning Areas W-151, W-168, W-470, and the Eglin Water Test Areas 1, 2, 3, 4, and 5. It will not apply to blocks within W-155 and W-174.)

When the activities of the Armament Development and Test Center at Eglin Air Force Base, Florida, may endanger personnel or property, the lessee agrees, upon receipt of a directive from the Regional Director (RD), to evacuate all personnel from all structures on the lease and to shut-in and secure all wells and other equipment, including pipelines on the lease, within 48 hours or within such other period of time as may be specified by the directive. Such directive shall not require evacuation of personnel and shutting-in and securing of equipment for a period of time greater than 72 hours; however, such a period of time may be extended by a subsequent directive from the RD. Equipment and structures may remain in place on the lease during such time as the directive remains in effect.

Stipulation No. 4--Transportation.

(This stipulation will apply to all blocks offered for lease in this sale.)

(a) Pipelines will be required: (1) if pipeline rights-of-way can be determined and obtained; (2) if laying of such pipelines is technologically feasible and environmentally preferable; and (3) if, in the opinion of the lessor, pipelines can be laid without net social loss, taking into account any incremental cost of pipelines over alternative methods of transportation and any incremental benefits in the form of increased environmental protection or reduced multiple use conflicts. The lessor specifically reserves the right to require that any pipeline used for transporting production to shore be placed in certain designated management areas. In selecting the means of transportation, consideration will be given to any recommendations of the Regional Technical Working Group for assessment and management of transportation of offshore oil and gas with the participation of Federal, State, and local governments and industry. All pipelines, including both flow lines and gathering lines for oil and gas, shall be designed and constructed to provide for adequate protection from water currents, storm scouring, and other hazards as determined on a case-by-case basis.

(b) Following the development of sufficient pipeline capacity, no crude oil will be transported by surface vessels from offshore production sites except in the case of emergency. Determination as to emergency conditions and appropriate responses to these conditions will be made by the Regional Director.

(c) Where the three criteria set forth in the first sentence of this stipulation are not met, and surface transportation must be employed, all vessels used for carrying hydrocarbons from the leased area will conform with all standards established for such vessels pursuant to the Ports and Waterways Safety Act (33 U.S.C. 1221 et seq.).

Stipulation No 5--Restriction on Exploration Activities.

(This stipulation will be included in leases on blocks shown on map 1 within W-151, W-168, W-470, and Eglin Water Test Areas 1, 2, 3, and 4.)

The placement, location, and planned periods of operation of surface structures on this lease during the exploration stage are subject to approval by the Regional Director (RD) after the review of an operator's Plan of Exploration (POE). Prior to approval of the POE, the RD shall consult with the Commander, Armament Division, Eglin Air Force Base, Florida, and the Commanding Officer, Naval Coastal Systems Center, Panama City, Florida, in order to determine the POE's compatibility with scheduled military operations. The POE will serve as the instrument for promoting a predictable and orderly distribution of surface structures, determining the location and density of such structures, and maximizing exploration while minimizing conflicts with Department of Defense activities. A POE will be disapproved in accordance with 30 CFR 250.34-1(e)(2)(iii) if it is determined that the proposed operations will result in interference with scheduled military missions in such a manner as to possibly jeopardize the national defense or to pose unacceptable risks to life and property. Moreover, if there is a serious threat of harm or damage to life or property, or if it is in the interest of national security or defense, approved operations may be suspended in accordance with 30 CFR 250.12(a)(1)(ii) and (iii). The term of the lease will be extended to cover the period of such suspension or prohibition. It is recognized that the issuance of a lease conveys the right to the lessee as provided in section 8(b)(4) of the OCS Lands Act to engage in exploration, development, and production activities conditioned upon other statutory and regulatory requirements.

Stipulation No. 6--Eight-Year Lease Term.

(This stipulation will be included in leases on blocks in the 400-meter to 900-meter depth range as shown on map 2.)

The lessee must commence the drilling of an exploratory well within 5 years of the date the lease becomes effective if there has been no suspension of operations (SOO). (In the event of a SOO, the 5-year period will be extended accordingly.) The exploratory well shall meet the depth and other criteria established in an approved exploration plan.

Stipulation No. 7--Exploration in Warning Area W-174.

(This stipulation will be included in leases on the following blocks within Warning Area W-174: NG 17-7, Pulley Ridge, 552-567, 596-597, 601-611, 640-641, 645-655, 684-686, 689-693, 696-699, 728-737, 740-743, 772-787, 816-829, 860-873, 904-919, 948-962, 992-993, 996-998, and 1002-1006.)

During the months of November through March, location of exploratory drilling structures (rigs and platforms) will be limited, as necessary, to provide for maneuvering by naval ships conducting training in the area. This will take the form of a prohibition on exploratory drilling within 10 nautical miles of another exploratory structure. This procedure is necessary to provide for placement of structures whereby exploration can be safely accomplished without

interruption to or interference with the national defense mission or unacceptable risks to life and property. If it is in the interest of national security or defense, operations may be suspended in accordance with 30 CFR 250.12(a)(1)(iii) with notification to the lessee by the Regional Director.

14. Information to Lessees.

(a) Information on Supplemental Documents. There is available from the Gulf of Mexico Regional Office a set of drawings depicting the State-Federal Boundary, including the acreage on the Federal side of the line. For copies of this and other documents identified as available from the Gulf of Mexico Regional Office, prospective bidders should contact the Public Information Unit at the address stated in paragraph 2, either in writing or by telephone at (504) 836-0519 or 838-0527. For additional information, contact the Regional Supervisor for Leasing and Environment at the same address or by telephone at (504) 836-0755 or 838-0756.

(b) Information on Navigation Safety. Operations on some of the blocks offered for lease may be restricted by designation of fairways, precautionary zones, anchorages, safety zones, or traffic separation schemes established by the Coast Guard pursuant to the Ports and Waterways Safety Act (33 U.S.C. 1221 et seq.). Corps of Engineers permits are required for construction of any artificial islands, installations, and other devices permanently or temporarily attached to the OCS seabed in accordance with section 4(e) of the OCS Lands Act, as amended.

(c) Information on a Memorandum of Understanding with the Department of Transportation on Pipelines. Bidders are advised that the Departments of the Interior (DOI) and Transportation entered into a Memorandum of Understanding dated May 6, 1976, concerning the design, installation, operation, and maintenance of offshore pipelines. Bidders should consult with both Departments for regulations applicable to offshore pipelines.

(d) Information on Unitization. Bidders are advised that, in accordance with section 16 of each lease issued, the lessor may require a lessee to operate under a unit, pooling, or drilling agreement, and that the lessor will give particular consideration to requiring unitization in instances where one or more reservoirs underlie two or more leases with a different royalty rate or a net profit share payment.

(e) Information on 10-Year Leases. For those blocks identified as having lease terms with an initial period of 10 years, bidders are advised that pursuant to 30 CFR 250.34-1(a)(3) the lessee shall submit to the MMS either an exploration plan or a general statement of exploration intention prior to the end-of-the ninth lease year.

(f) Information on Affirmative Action. Revision of Department of Labor regulations on Affirmative Action requirements for Government contractors (including lessees) have been deferred pending review of those regulations (see Federal Register of August 25, 1981, at FR 42865 and 42968). Should changes become effective at any time before the issuance of leases resulting

from this sale, section 18 of the lease form (Form MMS-2005, August 1962), would be deleted. In addition, existing stocks of the affirmative action forms described in paragraph 5 of this notice contain language that would be superseded by the revised regulations at 41 CFR 60-1.5(a)(1) and 60-1.7(a)(1). Submission of Form MMS-2032 (June 1985) and Form MMS-2033 (June 1985) will not invalidate an otherwise acceptable bid, and the revised regulations requirements will be deemed to be part of the existing Affirmative Action forms.

(g) Information on Ordnance Disposal Areas. The Air Force has released an indeterminable amount of unexploded ordnance throughout Warning Areas 151, 168, and 470, and Eglin Water Test Areas 1 through 5. The exact location of this unexploded ordnance is unknown, and lessees are advised that all lease blocks in this sale should be considered potentially hazardous to drilling and platform and pipeline placement.

(h) Information on Navy Operations. These blocks will be affected by the following clause: NH 16-5, Pensacola, 728, 772-778, 816-825, 860-872, 904-917, 950-951, 953-962, 992-995, and 997-1006; NH 16-9, Apalachicola, 221, 265, 309-310, 353-354, 357-398, 441-443, 485-487, and 529-532; and NH 16-8, Destin Dome, 24-36, 68-80, 112-113, 117-126, 157, 162-165, 168-170, 201-202, 206-214, 246-258, 290-302, 335-346, 380-390, 425-434, 470-478, 514-522, and 561-566.

The Navy advises that its Naval Coastal Systems Center (NCSC) conducts testing between April and October with peak operating months during the summer. During this period, oil companies may be requested to stand down from activity for 5- to 10-day periods (to a maximum of 15 days) as determined by the NCSC testing schedule.

(i) Information on Protection of the West Indian Manatee. Bidders are advised that the West Indian manatee is a marine mammal which is officially listed as an endangered species by the DOI. It is protected by the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.), and the Marine Mammal Protection Act of 1972, as amended (16 U.S.C. 1361-1407), and various other State and Federal laws and regulations. On October 22, 1979, (44 FR 60963), the DOI promulgated regulations (50 CFR 17.100-17.108) providing a means for establishing manatee protection areas. Also, there is the Florida Manatee Sanctuary Act of 1978 declaring the entire State of Florida as "refuge and sanctuary for the manatee." A Cooperative Agreement between the DOI and Florida on endangered species became effective on June 23, 1976.

(j) Information on Shallow Hazards. Federal regulation (30 CFR 250.34) requires a lessee to conduct shallow hazards and other geological and geophysical surveys that are necessary for the evaluation of activities to be carried out under a proposed exploration or development/production plan or activities being carried out under an approved plan.

Data collection by the lessee on a lease and, when necessary, off a lease will be analyzed and submitted by the lessee and then reviewed and, when necessary, reanalyzed by the RD to ensure that drilling, development, and production activities can be conducted in an acceptable manner with minimum risk or damage to human, marine, and coastal environments. Based on the review and analysis of the data received and other available data and information, the RD either approves or requires modification to an exploration or development/production plan or application for permit to drill or recommends that the Director, MMS, temporarily prohibit or suspend the conduct of exploration or development/production activities according to provisions of the OCS Lands Act, as amended, and appropriate regulations. Existing regulations authorize the RD to take whatever steps are necessary to assure safe operations offshore, whether shallow hazards are delineated before or after the lease sale.

(k) Information on Stipulation No. 6. Any lease issued for a term of 8 years will be cancelled after 5 years, following notice pursuant to the OCS Lands Act, if, within the initial 5-year period of the lease, the drilling of an exploratory well has not been initiated, or if initiated, the well has not been drilled in conformance with the approved exploratory plan criteria, or if there is not a suspension of operations in effect. For further information, see the Federal Register Notice (50 FR 13269) published April 3, 1985, subject: Notification of OCS Programwide Policy of Water-Depth Criterion for Longer Primary Lease Terms for OCS Oil and Gas Leases. See also the Federal Register Notice (50 FR 24546) published June 11, 1985, subject: Proposed Rule on Primary Lease Terms for Leases in Water Depths of 400 to 900 Meters.

(l) Information on Restriction of Exploration Activities. Bidders are advised that there will be restrictions on exploratory activities within areas identified as Eglin Water Test Areas (EWTA) 1, 2, 3, and 4 and Warning Areas W-151, W-166, and W-470 as shown on map 1. Stipulation No. 5 addresses these restrictions. Exploration activities will be confined to 30- by 30-mile drilling windows. The windows will shift from location to location as exploration progresses. Bidders should be aware that, because of the window concept, exploration on some leases may be delayed as operations proposed in drilling windows established for Sale 79 will have some priority over activities proposed in windows which would accommodate Sale 94 activities. Operations on Sale 94 leases issued on blocks within the six already established windows will be permitted as those windows open. Plans of Exploration (PGE's) are presently approved in window A, the two northern rows of blocks in window B, and the extreme eastern part of window F, as shown on map 2.

(m) Information on Joint Navy/Air Force Project in W-174. Bidders should be aware that a joint Navy and Air Force instrumented range is being installed in Warning Area W-174. This installation is expected to include an array of 13 transmitting towers ranging in height from 60 to 700 feet above the water surface. The array of towers will extend from the vicinity of

Key West, Florida, north toward the northern part of W-174. Each tower requires a clear line of sight with adjacent towers. Freedom from electromagnetic interference is also required on this line of sight. The specific locations of these structures will be available by July 1986.

(n) Information on Oil Spill Modeling. Bidders are advised that the State of Florida may request site-specific oil spill trajectory modeling as part of the coastal zone consistency concurrence process.

(o) Information on Biological and Oceanographic Study South of 26° N. Latitude. Bidders are advised that no Applications for Permit to Drill will be approved for POE's submitted on leases south of 26° N. latitude prior to completion of a biological and oceanographic resources study underway in the area. The study is expected to be completed in April 1986. If this requirement results in delay in approval of APD's the lease may be suspended in accordance with 30 CFR 250.12(a)(1)(iv) with notification to the lessee by the RD.

(p) Information on Possible Release of Geological and Geophysical Data. Bidders are advised that the Department is examining the question of whether the times established for the release of geological and geophysical data under 30 CFR Parts 250 should be extended to longer periods when moratoria or other conditions delay leasing. The question will be dealt with under separate rulemaking procedures.

(q) Information on Deferral of Payment of Balance of Bonus. Bidders on blocks subject to Stipulation No. 5 should carefully review paragraph 16 of this Notice.

15. OCS Orders. Operations on all leases resulting from this sale will be conducted in accordance with the provisions of all Gulf of Mexico OCS Orders, as of their effective dates, and any other applicable OCS Order as it becomes effective.

16. Military Activities. The Air Force (USAF) has three major air bases in Florida that use most of the Eastern Gulf of Mexico (EGOM) for research, development, testing, and evaluation of advanced tactical air-to-air and air-to-surface weapons systems. These air bases are Eglin Air Force Base, Tyndall Air Force Base, and MacDill Air Force Base. The only USAF test location large enough to meet the requirements of these bases is the EGOM. The types of missions conducted by the USAF involve flying from extremely high altitudes to very low altitudes at very high speeds. Safe and effective testing of most of these systems can be performed only over large expanses of water, subject to surveillance and monitoring control by strategically located land/water/airborne tracking facilities.

The intrinsic danger to the oil industry offshore is the occurrence of falling debris as drone planes are shot down or exploded, dropping of ordinance, low-flying planes, and offshore-to-onshore and vice versa testing of weapons and tactical testing missions. Threats to life and property could exist to crews and structures without proper control of OCS structures and operations in the area.

Therefore, a stipulation (Stipulation No. 5) which would restrict the timing and location of exploration activities will be included in any leases shown on Map 1 within Military Warning Areas W-151, W-166, W-470, and Egin Water Test Areas (EWTA) 1, 2, 3, and 4. There is concern over the military restrictions imposed on leases in the EGOM, particularly with regard to the delays involved in operating on leases outside of areas made available for drilling following Lease Sale 79 (January 5, 1984), the last sale in the EGOM. As a consequence of this concern, a bid for any block shown on Map 1 within Military Warning Areas W-151, W-166, W-470, and EWTA 1, 2, 3, and 4 will be subject to different procedures from those otherwise identified in this Notice. After the MMS completes its bid adequacy review, it will notify bidders of the results of this review. If a bid is determined to be inadequate, it will be rejected, and the bidder's deposit will be returned with interest, as prescribed in 30 CFR 218.155. If a bid is determined to be adequate, the bidder will be so notified, and will be required to furnish a corporate surety bond in a sum equal to the balance of the cash bonus bid, as directed by authorized officer. However, this notification and requirement will not constitute acceptance of the bid. Upon filing the surety bond as directed, the bidder is liable for payment of the four-fifths bonus unless the bid is subsequently rejected. No bid will be accepted until the United States determines that it is in its best interest to do so. The removal of the restriction on the initiation of exploration activities on a block or area will be deemed to be a situation when it is in the best interests of the United States to accept a bid for a lease on that particular block. At such time, the authorized officer will promptly accept the high bid submitted on a block and require the bidder to execute the lease, pay the remaining four-fifths bonus and the first year's rental by EFT, and file a bond as prescribed in 30 CFR 256.47(f). Failure to timely pay the remaining four-fifths bonus will be deemed to render the bidder in default of the bid payment, enabling the United States to obtain payment of the outstanding bonus from the bidder's surety. The four-fifths bonus and the first year's rental must be paid by EFT using the procedure described in paragraph 10 of this Notice. The Federal Reserve Bank of New York must receive the EFT payment no later than noon, Eastern Standard Time, on the eleventh business day after receipt of the notice of bid acceptance. The term "business day" is defined as a day on which the Gulf of Mexico Regional Office is open for business.

At such time as the United States may determine that it would not be in its best interests to accept a bid, the MMS shall reject such bid for a lease within the above-referenced Military Warning Areas and Egin Water Test Areas, and refund the bid deposit with interest, in accordance with 30 CFR 218.155. In any event, if the authorized officer does not accept the bid within 5 years after the date of the lease sale, the MMS shall reject such bid and return the bid deposit to the bidder with actual interest earned.

Authority for the procedures in this paragraph is in 30 CFR 218.155, 256.46(b), 256.47(e)(2), 256.58(g)(2), and 256.59.

APPENDIX B REVIEWS FROM MMS

AIR QUALITY REVIEW

CER/EA No. N-2526 Due Date 9/2/86 Lease(s) OCS-G 8363, 8364, 8368

Block(s) 455, 456, 587 Area Florida Middle Ground

Onshore Emissions

Onshore Base: Panama City, Florida New or Revised: Yes No

Onshore Emissions Calculations (If onshore base is new or revised): N/R

NO_x tons/yr; CO tons/yr; VOC tons/yr;

TSP tons/yr; SO₂ tons/yr

Offshore Emissions

Major Sources - Offshore Emissions Calculations:

NO_x 544.12 tons/yr; CO 88.71 tons/yr; VOC 23.11 tons/yr;

TSP 20.46 tons/yr; SO₂ 36.30 tons/yr

Minor Sources - Offshore Emissions Calculations:

NO_x 60.40 tons/yr; CO 9.81 tons/yr; VOC 2.51 tons/yr;

TSP 2.50 tons/yr; SO₂ 4.42 tons/yr

Total Offshore Emissions:

NO_x 604.52 tons/yr; CO 98.52 tons/yr; VOC 25.62 tons/yr;

TSP 22.96 tons/yr; SO₂ 40.72 tons/yr

Emissions Exemption Calculations

Distance to Nearest Land in Statute Miles: 69

Exemption: For CO; $E = 3400D^{2/3} = 57,198$ tons/yr

For NO_x, VOC, TSP, SO₂; $E = 33.3D = 2298$ tons/yr

There will be significant effect on air quality from the proposed action:

Yes No

Information Source(s): Plan, ER, Staff

Comments/Recommendations: None

[Signature]
Meteorologist

[Signature]
Date

AIR QUALITY, BIOLOGICAL, AND CULTURAL RESOURCES REVIEW

CER/EA No. N-2526 Due Date _____ Lease(s) OCS-G 8363, 8364, 8368
Block(s) 455, 456, 587 Area Florida Middle Ground

AIR QUALITY REVIEW

Onshore Base: _____ New or Revised: Yes ___ No ___

Rig Type: _____ Distance Offshore _____ mi: Exempt: Yes ___ No ___

Information Source(s): _____

Comments/Recommendations: _____

Meteorologist Date

BIOLOGICAL REVIEW

The proposed action is within a protective zone established for a biologically sensitive area(s): Yes ___ No X
Biological Area(s) _____

U.S. Fish and Wildlife Service comments required: Yes X No ___

Special protective measures relative to endangered/threatened species reflecting previous biological opinions are recommended as conditions of plan/application approval: Yes ___ No X

Information Source(s): Plan, EIS, Visual II, FWS Correspondence

Comments/Recommendations: None



Reviewer

1 August 1986

Date

CULTURAL RESOURCES REVIEW

New Surface Activities: Yes X No ___

Cul. Res. Rept. required: Yes ___ No X Submitted Yes ___ No ___

Potential or known cultural resources within area of concern identified at location of the proposed action: Yes ___ No X

Description: _____

Information Source(s): Plan, EIS, Visual II

Comments/Recommendations: None



Reviewer

1 August 1986

Date

UNITED STATES GOVERNMENT
MEMORANDUM

DATE: AUG 25 1986

To: Supervisor, Exploration/Development Plans Unit (FO -2-1)

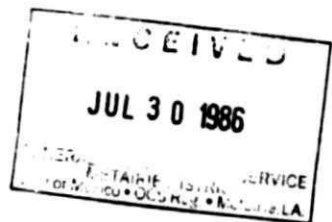
From: District Supervisor, New Orleans District (FO-3)

Subject: Initial Plan of Exploration/ ~~8068~~ TENNESSEE
CES 8363, -64, & -68, FMS 455, 456
Control No. N-2526 #587

Enclosed is our review of the subject plan.

Jack Hendricks
District Supervisor

Enclosures



UNITED STATES GOVERNMENT
MEMORANDUM

Date: 8/25/86

To: Supervisor, Exploration/Development Plans Unit (FO-2-1)
From: District Supervisor, NEW ORLEANS District, (FO-3)
Subject: Hazards Review/Recommendations for Approval
Plan of Exploration (X) - Development/Production ()
Area(s) FLORIDA MIDDLE GROUNDS
Block(s) 455, 456 & 587
Lease(s) OCS-G 8367, -G 836A, & -G 836B
Operator(s) TENNECO OIL F & P

The subject proposal includes platforms,
TEN (10) wells, and ties.

Seafloor Hazards: None apparent

Subsurface Hazards: Possible buried karst topography.
Caution advised.

Other Hazards (Pipeline, Sunken Ships, etc.) _____

None known

Other Known Material (Sand, Gravel, Shell, etc.) _____

None known

Recommendation for approval: Approval

Jack Hendricks
DISTRICT SUPERVISOR

cc:

Preparer(s): C.R. Adams

UNITED STATES GOVERNMENT
MEMORANDUM

July 30, 1986

To: Supervisor, Exploration/Development Plans Unit, Plans, Platform and Pipeline Section, Rules and Production, Gulf of Mexico Region (RP-2-1)

From: Supervisor, Platform/Pipeline Unit, Plans, Platform and Pipeline Section, Rules and Production, Gulf of Mexico Region (RP-2-2)

Subject: Plan of Exploration for TENNE
Florida Middle ^{Carroll} 587
Area, Blocks 455, 456, Leases OCS-G 8363, 8364, 8368

30 CFR 250.34 Control No. N-2526

Proposed Well/Platform:

Identification and Location

Existing Pipelines Within 500 Feet

FMG 455-Well A-1500'FNL+6200'FEL

None

FMG 455-Well B-6200'FSL+6500'FEL

None

FMG 455-Well C-1000'FSL+1300'FEL

None

FMG 455-Well D-7800'FSL+500'FEL

None

FMG 455-Well E-6700'FSL+5600'FWL

None

FMG 456-Well F-4300'FNL+1300'FWL

None

FMG 456-Well G-7000'FSL+4700'FWL

None

FMG 456-Well H-1100'FNL+700'FWL

None

FMG 587-Well I-7000'FNL+6200'FEL

None

FMG 587-Well J-5500'FSL+7700'FEL

None

MINERALS MANAGEMENT SERVICE

Remarks:

JUL 31 1986

RULES AND PRODUCTION

Robert F. Kelly

Robert F. Kelly

FTorres:lv:Disk 5

UNITED STATES GOVERNMENT
MEMORANDUM

Date 15 August 1986

To: Chief, Plans, Platform, and Pipeline Section, Offshore
FIELD OPERATIONS, GOM OCS REGION (FO-2-1)

From: Chief, Environmental Operations Section, Leasing and
Environment, GOM OCS Region (LE-5)

Subject: Preliminary Review of Plan/Application No. N-2526

CULTURAL RESOURCES

There is ___ is not a Cultural Resource problem requiring
modification of the proposed location(s).

The problem is _____

The problem can be resolved by _____

BIOLOGICAL RESOURCES

There is ___ is not a Biological Resource problem requiring
modification of the proposed location(s).

The problem is _____

The problem can be resolved by _____

(Signature)
of Les Dauterive

cc: CER File (LE-5)

APPENDIX C REVIEWS FROM OTHER AGENCIES



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS ARMAMENT DIVISION (SC)
EGLIN AIR FORCE BASE, FLORIDA 32512-5000



14 August 1986

U. S. Department of the Interior
Minerals Management Service
Gulf of Mexico OCS Region
Attn: Mr D. J. Bourgeois
Regional Supervisor, Field Operations
1420 South Clearview Parkway
New Orleans LA 70123-2394

Dear Mr Bourgeois

The Armament Division interposes no objections to the Plan of Exploration for Florida Middle Ground Blocks 455, 456 and 587 covered by your letter of 8 August 1986, Control No. N-2526.

This approval covers the period from the present until 31 December 1986. It is necessary in the interests of National defense that exploration in these blocks be completed not later than 31 December 1986.

Sincerely


H. L. DIMMIG
Chief Scientist



United States Department of the Interior
FISH AND WILDLIFE SERVICE

Division of Ecological Services
1612 June Avenue
Panama City, Florida 32405-3721

August 12, 1986

MINERALS MANAGEMENT SERVICE

Memorandum

AUG 14 1986

To: Regional Director, Gulf of Mexico OCS Region, Minerals Management Service, New Orleans, Louisiana attn: FO-2-1 **MINERALS AND PRODUCTION**

From: Field Supervisor, Ecological Services, U.S. Fish and Wildlife Service, Panama City, Florida

Subject: Initial Plan of Exploration, Tenneco Oil Exploration and Production, Leases OCS-G 8363, 8364, and 8368, Blocks 455, 456, and 587, respectively, Florida Middle Ground Area, DM 655-1795

The Fish and Wildlife Service has reviewed the subject document in accordance with 655 DM 1. The document covers the exploratory drilling of wells A,B,C, D, and E in block 455; wells F,G, and H in block 456; and wells I and J in block 487, Florida Middle Ground Area.

Review of the Plan of Exploration and Environmental Report indicates the geophysical surveys did not reveal the presence of hard or live bottom areas near the proposed well site locations. Further, the proposed operations are approximately 43 miles away from the Florida Middle Grounds Reef complex. The Oil Spill Contingency Plan appears to be adequate in case of an oil spill or related emergency. Therefore, we have no objections to the operations as proposed.

We appreciate the opportunity to provide comments.

Sincerely,

James M. Barkuloo
Field Supervisor

cc:
NMFS, Panama City, FL
FL Gov. Office, Tallahassee, FL

LAS/bp
3/DD



N-2526
UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE

Southeast Regional Office
9450 Koger Boulevard
St. Petersburg, Florida 33702

August 19, 1986 F/SER113:EK

Mr. D. J. Bourgeois
Regional Supervisor
Minerals Management Service
1420 South Clearview Parkway
New Orleans, Louisiana 70123-2394



Dear Mr. Bourgeois:

The National Marine Fisheries Service has reviewed the Initial Plan of Exploration and Environmental Report for Leases OCS-G 8363, 8364, and 8368 (FO-2-1).

The document discusses the proposed exploratory drilling of hydrocarbon wells (10) in blocks 455, 456, and 487 in the eastern Gulf of Mexico. Review of the plan indicates that live and hard bottom habitats are not present near the proposed well sites, and that the sites are about 40 miles from the Florida Middle Grounds Reef complex. Based upon our review of the material submitted, we have no objection to the proposed work.

Should you have any questions, please contact Dr. Ed Keppner of our Panama City Florida Area Office at (904) 234-5061.

Sincerely yours,

Edwin J. Keppner

to Richard J. Hoogland
Assistant Regional Director
Habitat Conservation Division



N-2526

CH



STATE OF FLORIDA
Office of the Governor
THE CAPITOL
TALLAHASSEE 32301

BOB GRAHAM
GOVERNOR

RECEIVED

SEP 3 1986

September 2, 1986

Minerals Management Service
Leasing & Environment

Mr. A. Donald Giroir
Minerals Management Service
Gulf of Mexico Region
1420 South Clearview Parkway
New Orleans, Louisiana 70123

Dear Mr. Giroir:

In response to your letter of August 7, 1986 this office reviewed and coordinated a review of the proposed Exploration Plan and its accompanying Environmental Report for leases OCS-G 8363, 8364 and 8368, Blocks 455, 456 and 587, respectively, Florida Middle Ground Area. (Control No. N-2526).

Tenneco proposes drilling one to ten wells on these blocks. Subsequent drilling will depend on results obtained from drilling the first well. We find the documents extremely well written and adequately supply information and assessments needed to ensure environmentally sound drilling activities in these blocks. We compliment Tenneco on their efforts to ensure that Florida's concerns were addressed, especially regarding the "Oil Spill Trajectory Analysis and Response Plan", to produce more useful documents.

It was noted on page 7 (under Equipment) of the Exploration Plan (EP) that the response time for clean up equipment to be brought out from Panama City was six hours, while on page 10 of the Response Plan listed 24 to 30 hours. A check with Mr. Randall Williams of Tenneco indicated that the EP had a typographical error and the correct response time was 24 hours. In addition, Tenneco should discuss the time frames needed to activate and deploy both boat and air dispersant systems. Based on the potential impact times for an oil spill to reach Florida's territorial waters and coastal resources, there is adequate time for clean up response.

Written comments received from the Departments of Environmental Regulation and State and the Governor's Energy Office are enclosed for your information.

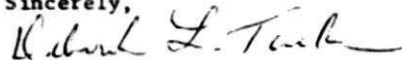
This letter does not constitute a concurrence or objection to the consistency certification which accompanied the Plan of Exploration. This will be sent to you as soon as possible.



Mr. A. Donald Giroir
September 2, 1986
Page Two

We appreciate the opportunity to review these documents.

Sincerely,



Deborah L. Tucker
Governmental Analyst

DLT/dwe

cc: Randall Williams/Tenneco

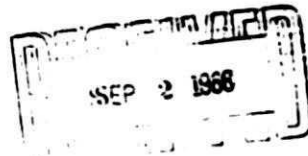
STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32301-8241



BOB GRAHAM
GOVERNOR
VICTORIA J. TSCHINKEL
SECRETARY

September 2, 1986



Ms. Debby Tucker
State Planning and Budgeting
Office of the Governor
404 Carlton Building
Tallahassee, Florida 32301

Dear Debby:

Re: Plan of Exploration and Federal
Consistency Certification, Florida
Middle Grounds Blocks 455, 456 and 587,
Tenneco Oil Company

Tenneco proposes to drill a maximum of five wells on the referenced blocks. The blocks are situated on the mid-Florida shelf, ranging from 128-160m (Blocks 455 and 456) and 162-174m (Block 587).

The geophysical survey presented a smooth, sloping seafloor lacking in significant topographic features. Some small depressions were detected which should be avoided. There is no evidence of hard bottom structure or outcrops which would be favorable habitat for benthic communities. Consequently, we believe these blocks can be explored with minimal disturbance to the marine environment.

The oil spill trajectory analyses only predict landfall in a few scenarios and after several (7-9+) days. The Plan of Exploration lists a six hour response time to deploy a Fast Response Unit from Panama City. Page 10 of the Response Plan gives 16-20 hrs and 24-30 hrs depending on the location of the support vessel. These latter times are more realistic and are adequate considering the predicted spill travel times. Although we are aware that dispersant deployment can occur within acceptable time frames to meet the trajectory predictions, these times

Ms. Debby Tucker
September 2, 1986
Page Two

should be discussed in the Response Plan. We request that Tenneco be advised of this omission.

We have no objections to the proposed exploration under the OCS Lands Act. We concur with the operator's certification that the exploration of Florida Middle Grounds Blocks 455, 456 and 587 at the designated well sites is consistent with the DER's authorities in the Florida Coastal Management Program.

Cordially,



Lynn F. Griffin
Environmental Specialist
Intergovernmental Programs
Review Section

cc: Dave Worley
Mary Smallwood

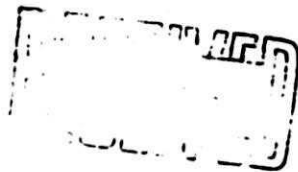


FLORIDA DEPARTMENT OF STATE

George Firestone
Secretary of State

DIVISION OF HISTORICAL RESOURCES

R.A. Gray Building
Tallahassee, Florida 32301-8020
(904) 438-1460



August 28, 1986

In Reply Refer to:
Mike Wisenbaker
Historic Sites Specialist
(904) 487-2333

Ms. Debby Tucker
Intergovernmental Clearinghouse
Office of the Governor
The Capitol
Tallahassee, Florida 32399

RE: Your memorandum and attachment of August 12, 1986
Cultural Resource Assessment Request, Exploration Plan/Environmental Report
Florida Middle Ground Blocks 455, 456 and 587 - Proposal to drill one to
ten wells by Tenneco for evaluation of hydrocarbon potential, SAI No FL86081101201C

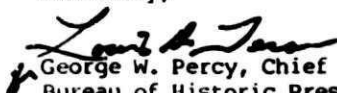
Dear Ms. Tucker:

In accordance with the provisions of the applicable local ordinance __ and/or Sections 253.77, 267.061, 380.06, 380.061 and 403.918(2)(a)6, Florida Statutes, and implementing state regulations, and/or in accordance with the provisions of the National Historic Preservation Act of 1966 (Public Law 89-665) as amended and related federal laws and their implementing procedures for federally involved projects , we have reviewed the above cited project(s) to determine its(their) effect on significant archaeological and historical sites and properties.

A review of the Florida Master Site File indicates that no significant archaeological and/or historical sites are recorded for or considered likely to be present within the project area(s) . Because of the project(s) nature it is considered unlikely that any such sites will be affected. Therefore, it is the opinion of this office that the proposed project(s) will have no effect on any sites listed, or eligible for listing, in the National Register of Historic Places, or otherwise of national, state or local significance. The project(s) is(are) consistent also with Florida's historic preservation laws and concerns, and may proceed without further involvement with this agency.

If you have any questions concerning our comments, please do not hesitate to contact us. Your interest and cooperation in helping to protect Florida's archaeological and historic resources are appreciated.

Sincerely,


George W. Percy, Chief

Bureau of Historic Preservation and
State Historic Preservation Officer

GWP/nfk
Enclosure ()

OFFICE OF THE GOVERNOR

The Capitol, Tallahassee, Florida 32301
Telephone: 904/488-1234

MEMORANDUM

To: Debby Tucker and Paul Johnson, OCS Committee, Office of Planning and Budgeting
From: *W.W.G.* W. W. Goode, Governor's Energy Office
Subject: Exploration Plan/Environmental Report Florida Middle Ground Blocks 445, 456, and 587. (SAI # FL 8508110201C).
Date: August 19, 1986

The "Description of the Proposed Action" taken from the Environmental Report/Exploration Plan for Florida Middle Ground Blocks 455, 456, and 587 has been reviewed. The plan submitted by Tenneco appears adequate and further comments are not made.

Additionally, we have no comments to make concerning any lack of consistency with Florida's Coastal Management Program.

WWG/mia

