In Reply Refer To: MS 5231

October 7, 1992

Freeport-McMoRan Oil & Gas Company Attention: Mr. John Seip Post Office Box 60004 New Orleans, Louisiana 70160-0004

#### Gentlemen:

Reference is made to the following plan received September 23, 1992:

Type Plan - Initial Plan of Exploration Lease - OCS G 13625 Block - 317 Area - Eugene Island Activities Proposed - Wells A, B, C, E, and F

In accordance with 30 CFR 250.33, this plan is hereby deemed submitted and is now being considered for approval.

Your control number is N-4358 and should be referenced in your communication and correspondence concerning this plan.

Sincerely,

(Orig. Sgd.) A. Donald Giroir

Foo

D. J. Bourgeois Regional Supervisor Field Operations

bcc: Lease OCS-G 13625 POD File (MS 5032) MS 5034 w/public info. copy of the plan and accomp. info.

MTolbert:cic:09/28/92:POECOM

Office Chicks of Services NOTED - SCHEXNAILDRE



Freeport-McMoRan Oil & Gas Company A Division of Freeport-McMoRan 1615 Poydras Street New Orleans, LA 70112 P.O. Box 60004 New Orleans, LA 70160

Telephone: 504-582-4000 Fax: 504-582-4585

Saptember 21, 1992

Minerals Management Service 1201 Elmwood Park Blvd. New Orleans, LA 70123-2394

Attention: Regional Supervisor Field Operations

Re: Plan of Exploration OCS-G 13625 Eugene Island Block 317 SEP 2 3 1992

QUERATIONS ONE SERVICE

Region, New One Service

#### Gentlemen:

In accordance with 30 CFR 250.33, Freeport-McMoRan Inc. requests your approval for a Plan of Exploration for the subject block. Enclosed are eleven (11) copies of which five copies include proprietary data not subject to disclosure.

If any further information is necessary, please advise.

Sincerely,

John Seip

Supervisor,

Regulatory Affairs

/jb



### PLAN OF EXPLORATION OCS-G 13625 Eugene Island Block 317

In compliance with 30 CFR 250.33, the following information is submitted for the planned exploration activities for Eugene Island Block 317.

### 1. Description of Exploration Activities

Freeport-McMoRan Inc. proposes to drill six (6) wells located in Eugene Island Block 317.

Activities proposed under this POE will commence approximately November 15, 1992, and be completed in approximately 180 days. At that time, we plan to review all available well data and make a determination for further dr. Ing activities. If additional drilling is planned, a supplemental POE will be filed.

### 2. Description of Drilling Unit

The proposed wells will be drilled with a typical jack-up rig. Attached as Exhibit 1 is a schematic of a typical jack-up rig. When a rig is selected, the rig specifications will be made a part of the Application for Permit to Drill.

Safety features will include well control and blowout prevention equipment as described in 30 CFR 250.50. The appropriate life rafts, life jackets, ring buoys, etc. as prescribed by the U.S. Coast Guard will be maintained on the facility at all times.

#### Well Locations

The locations of the proposed wells in addition to the proposed depths are shown on the attached well location plat, enclosed herewith as Exhibit 2.

### 4. Structure Map and Cross Section

Attached as Exhibit 3 is a structure map, and as Exhibit 4 is a cross section.

#### Shallow Hazards

Attached as Exhibit 5 is a Shallow Hazards Report.

#### Bathymetry Map

Attached as Exhibit 6 is a bathymetry map.

#### 7. Oil Spill Contingency Plan

All drilling operations shall be performed in accordance with industry standards to prevent pollution of the environment. An Oil Spill Contingency Plan has been approved by the Minerals Management Service in accordance with 30 CFR, Subpart C, Part 250.42. This plan designates an Oil Spill Team consisting of company

Plan of Exploration OCS-G 13625 Eugene Island Block 317 Page 2

personnel and contract personnel. This team's duties are to eliminate the source of any spill, remove all sources of possible ignition, deploy the most reliable means of available transportation to monitor the movement of a slick, and contain and remove the slick if possible.

Freeport-McMoRan Inc. is a member of Clean Gulf Associates (CGA). The CGA has two permanent equipment bases in Texas, at Port Aransas and Galveston, and four bases in Louisiana, at Venice, Grand Isle, Intracoastal City, and Cameron. Each base is equipped with fast response skimmers and there is a barge mounted high volume open sea skimmer based on Grand Isle, Louisiana. In addition to providing equipment, the CGA also supplies advisors for clean-up operations. Equipment available from CGA and the base it is located at is listed the CGA Manual, Volume I, Section III.

Estimated response time for a spill at Eugene Island Block 317 is 16 to 18 hours (2 hours procurement, 2 hours load out, 12 hours travel [includes inland travel time], 1 hour deployment). Equipment located at intracoastal City, Louisiana, would be utilized first with additional equipment transported from the nearest equipment base on-site as required.

### 8. Trajectory Analysis

Attached as Exhibit 7 is a Trajectory Analysis.

### 9. New or Unusual Technology

No new techniques or unusual technology will be required for this operation.

### 10. Lease Stipulations

Lease Stipulation No. 1 requires the protection of Archeological Resources. Please note that an Archeological and Hazard Study has been submitted.

### 11. Discharges

All discharges from proposed drilling in Eugene Island Block 317 will comply with the Environmental Protection Agency NPDES General Permit for the Gulf of Mexico. Attached as Exhibit 8 is a discussion of the quantity, rates of discharge, and composition of wastes, and as Exhibit 9 is a list of Mud Components.

Plan of Exploration OCS-G 13625 Eugene Island Block 317 Page 3

### 12. Hydrogen Sulfide

We request that this area be classified as an area where the absence of  $H_2S$  is unknown in accordance with the attached  $H_2S$  report (Exhibit 10).

### 13. Projected Emissions

Projected emissions are included on the enclosed Air Quality report as Exhibit 11.

### 14. Onshore Base

All onshore operations are anticipated to take place at Intracoastal City, Louisiana. This will serve as port of debarkation for supplies and crews. No onshore expansion or construction is anticipated with respect to this activity. Eugene Island Block 317 is located approximately 75 miles south of the Louisiana Coastline. Attached as Exhibit 12 is a Vicinity Map.

The Intracoastal City base is capable of providing the services necessary for the proposed activities. It has 24 hour service, a radio tower with a phone patch, dock space, equipment and supply storage base, drinking water, etc. During drilling operations, a supply boat will make three (3) round trips per week, a crew boat will make three (3) round trips per week, and a helicopter will make seven (7) round trips per week.

The onshore activities associated with these exploration activities should not result in any increase in the size and number of onshore support and storage facilities or land and personnel requirements.

### 15. Coastal Zone Consistency

A certificate of Coastal Zone Consistency for the State of Louisiana is attached as Exhibit 13. Attached to the Coastal Zone Consistency are copies of the letters to the State Times and the Abbevilie Meridional requesting publication of the Public Notice.

### Environmental Report

Attached as Exhibit 14 is an Environmental Report.

Plan of Exploration OCS-G 13625 Eugene Island Block 317 Page 4

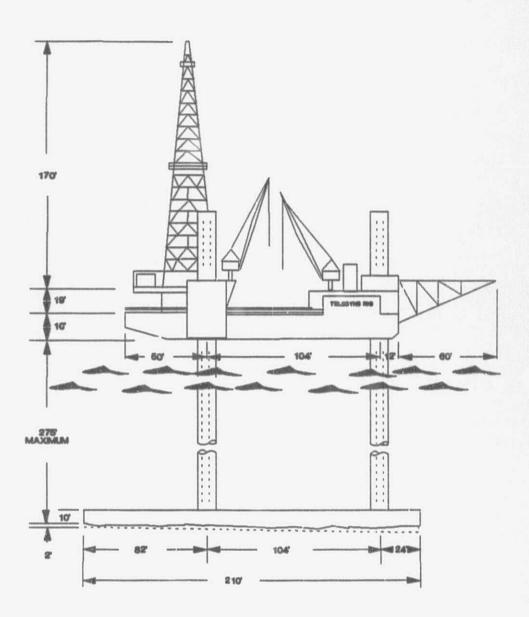
### 17. Authorized Representative

Inquiries may be made to the following authorized representative of Freeport-McMoRan Inc.:

Mr. John Seip Supervisor, Regulatory Affairs Freeport-McMoRan Inc. P.O. Box 60004 New Orleans, LA 70160 504/582-4184

### 18. List of Exhibits

- Jack-Up Rig and Rig Equipment
- 2. Well Location Plat
- 3. Geological Structure Map
- 4. Schematic Cross Section
- 5. Shallow Hazards Report
- 6. Bathymetry Map
- 7. Trajectory Analysis
- 8. Rates of Discharge
- 9. Mud Components
- 10. H<sub>2</sub>S Report
- 11. Air Quality Report
- 12. Vicinity Map
- 13. Coastal Zone Consistency Certification
- 14. Environmental Report



#### DESCRIPTION OF EQUIPMENT

DRAWWORKE Continental-Emsco Model C-3, Type II 3,000 HP Powered by two Westinghouse 370 DC motors raced at 1,200 HP each.

Sand reel for 22,190' of 9/16" sandline.

Par-Mac, Model RC60 auxiliary hydromatic brake.

ROTARY Continental-Emsco Model T-3750, 37-" i.d. maximum, driven by one Westinghouse 370 DC motor rated at 1,000 HP.

MUD PUMPS

Two Continental-Emsco 1,600 HP F-1600 triplex; each pump powered by two Westinghouse 370 DC motors rated at 1,000 HP each.

POWER UNITS

Two EMD 2,200 HP 16-645El diesel engines each powering two D79G and one D32K DC generators.

Two 700 KW AC generators each powered by a caterpillar D-399 TA diesel engine.

DRILL STRING 12,500° 5" o.d. 19.5 lb/ft range 2 Grade "E" drill pipe with 4-1/2" IF connections.

2,500 5" o.d., 19.5 lb/ft range 2 Grade "X-105" drill pipe with 4-" IF connections.

Twelve 8" o.d. dr.11 collars x 2-13/16" i.d. x 30' drill collars with 6-5/8" regular connections.

B.O.P. Three 13-5/8", 10,000 psi Cameron Type "U" single units.

One 13-5/8", 5,000 psi Hydril Type GK.

One Koomey, Model 26160-3S closing unit, 160 gal. capacity with six outlets and two stations with regulating valve for the Hydril and regulating valve for all other operations.

One Grey, Model 5XH inside blowout preventer, 5,000 rsi working pressure for 5" drill pipe.

One OMSCO Model 6-5/8" regular LH, Kelly stock cock, 10,000 psi working pressure.

One OMSCO Model 5XH, 3" i.d. drill pipe safety valve, 5,000 psi working pressure for 5" drill pipe.

Choke manifold and kill manifold with two 4", 5,000 psi working pressure full opening wings, three 10,000 psi W.P. choke wings.

B.O.P. EOUIPMENT (Cont'd.) SWACO 2-9/16" automatic back pressure control valve, 10,000 psi working pressure.

4", 5,000 psi working pressure choke line.

27, 10,000 psi working pressure kill line.

DERRICK AND SUBSTRUCTURE

Continental Emsco Type 20R, 147' dynamic Derrick with 30' base designed for 100 mph wind with full setback and rated at 1,400,000 lbs. A.P.I. gross nominal capacity.

Bethlehem 40' wide  $\times$  46' long  $\times$  17.8' high substructure with 500,000 lbs. setback capacity.

DRILLING EQUIPMENT Continental-Emsco Model RA-60-7, 500 ton crown block, with 7.60° Dia. sheaves growed for 1- ° drill line, complete with sandline catline, and tugger line sheaves.

Continental-Emsco Model RA-60-6, with rubber bumper, 500 ton traveling block with 6-60" Dia. sheaves and "Crown-U-Matic" safety shut down device.

Continental-Emsco guidance system.

B.J. Model 5.500, 500 ton hook.

Continental-Emsco Model L-650, 650 ton swivel, with Kelly spinner.

King, Model 4SC circulating head with wire line stripper, 5,000 psi.

Two 3-" x 70' long rotary hoses, 5,000 psi working pressure.

Handling tools consisting of:

Wire line anchor, complete with wire line snubber.

Elevator assemblies for contractor zip lift drill collars.

Kelly spinner with air surge tank.

One 5-" o.d. x 40" (Hexagonal) Kelly.

Two Kelly saver subs for 5-" contractor furnished Kelly.

Kelly saver sub rubber protectors.

One Varco spinning wrench, for 5" drill pipe make-up.

DRILLING <u>EOUIPMENT</u> (Cont'd.)

Skips for all contractor furnished drill pipe and drill collars.

Two I.R. Ingersoll Rand, Model HUL-40 air hoists located on rig floor.

Four I.R. Ingersoll Rand, Model HUL-40 air hoists located on cellar deck.

I'shing tools consisting of:

Fishing tools for pickup of contractor furnished drill pipe and drill collars.

MUD EQUIPMENT One Brandt dual tandem screen shaker.

One Demco Model 122 desander with 2-12" cones driven by Mission Model 5x6R centrifugal pump, 60 HP rated at 800 GPM.

One Democ Model 410-H desilter with 10-4" cones, drivel by Mission Model 5X6R centrifygal pump, 60 HP rated at 800 GPM.

One Wellco Model 5200 degasser, driven by Mission Model 5x6R centrifugal 60 HP pump.

Two jet mixing hoppers.

Four Mission Model 5x6R centrifugal pumps, powered by 60 HP A.C. motors.

Three lightnin Model 75-Q-20 HP rotary mud agitators powered by explosion proof electric motors.

CRANES Two Link Belt Model ABS 1088 "Seamaster" w/70' boom 63,650 lb. net capacity at 15' radius.

LIVING QUARTERS Sixty man air conditioned quarters with recreation room.

HELIPORT 60' X 70' to accommodate a "Sikorsky" S-62 helicopter.

COMMUNICATIONS One SSB radio.

One 1000 watt linear amplifier for SSB unit.

Two VHF radios.

One aircraft radio.

#### COMMUNICATIONS (Cont'd.)

One aircraft homing Beacon.

Two portable battery operated radios.

Telephone system to approximately 16 locations on drilling unit.

"Clear Call" public address system with approximately 12 stations on drilling unit.

#### AIR COMPRESSORS One Stewart Stevenson Model B-212-3CA, 580 SCFM at 125 P.S.I.

One Stewart Stevens: Model K-25, 21-28 SCFM at 70-200 P.S.I.

One Stewart Stevenson Model B-72, 56-73 SCFM c 60 125 P.S.I.

#### ADDITIONAL. EQUIPMENT

One 10,000 lb. stockless anchor.

the anchor windlass, rated pull of 37,000 to . at 32 FPM with 950 fc. speed capacity of 2-1/2" line

Two Reda Model 3J400 salt water supply pumps, rated at 1350 GPM with 125' of head.

Two drill water pumps, rated at 475 GPM with 100' of head.

Two potable water pumps, recal at 20 GFM with 80' of head.

Two Meco pucabl . water . in rated at 7920 GPD.

Three 400 AMP electri welding units.

Three oxyacetylens welding units.

One caterpillar Mode. D-334TA engine, 235 HP at 1800 RPM, driving a 150 KW /// generator for emergency power.

One Red Fox 2500 sewage treatment plant rated at 2500 gpm.

One logging unit.

One cementing unit.

SAFFTY DUIPMENT Life saving quipment such as, but not limited to 1 fe vests, rafts, escape ladders, nets, ropes and first aid kits.

### SAFETY EQUIPMENT

(Cont'd.)

Emergency warning system.

Battery powered emergency li heing system.

Fire fighting equipment consisting of:

- Emergency saltwater pumps.
   Dry chemical system.
   Carbon dioxide hand extinguishers.

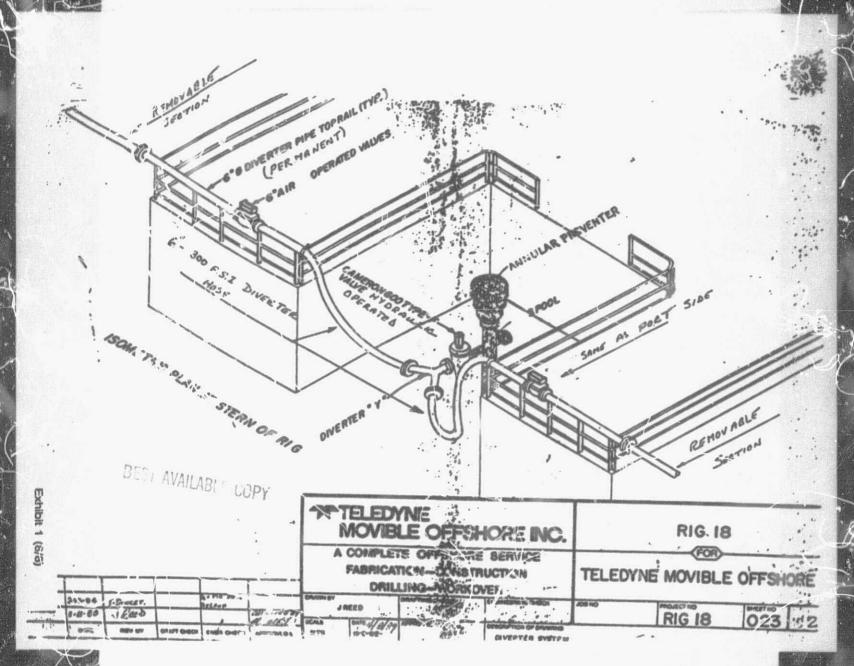
### OPERATING LIMITATIONS

### ON BITTOM OPERATING CONDITIONS (NON-HURPICANE)

- 1. Dasign wave height 33 feet
- 2. Wind speed 58 knots.
- Still water depth me ruum 250 feet (excludes scorm tide) - minitum - 24 feet
- 4. Storm tide 1.0 feet.

### ON BOTTOM OPERATING CONDITIONS (HURRICANE)

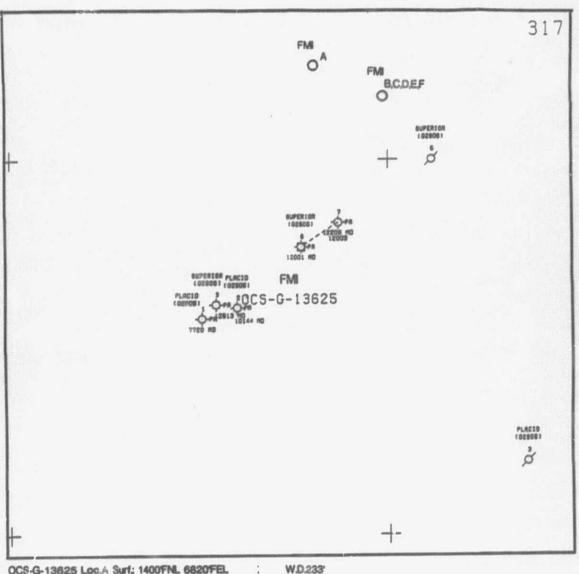
- 1. Design wave height 60.0 feet.
- 2. Wind speed 200 knots.
- 3. Still water depth maximum 200 feet (excludes storm tide) minimum 24 feet.
- 4. Stora tide 4.0 feet.



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Exh/bit 6 (1/1)



Freeport-McMoRan, Inc.

EUGENE ISLAND BLK.317

WELL LOCATION PLAT

2000

PY: WDS c.i. nave- 9-92

Exhibit 2 (1/1)

### Eugene Island Block 317

#### OCS-G 13625

### OIL SPILL TRAJECTORY ANALYSIS

In the event a spill occurs from Eugene Island Block 317, our company has projected trajectory of a spill utilizing information in the Environmental Impact Statement (EIS) for OCS Lease Sales 131, 135, and 137.

The EIS contains oil spill trajectory simulations using seasonal surface currents coupled with wind data, adjusted every 3 hours for 30 days or until a target is contacted.

Hypothetical spill trajectories were simulated for each of the potential launch sites across the entire Gulf. These simulations presume 500 spills occurring in each of the four seasons of the year. The results in the EIS were presented as probabilities that an oil spill beginning from a particular launch site would contact a certain land segment with 3, 10, or 30 days. Utilizing the summary of the trajectory analysis (for 10 days), the probable projected land fall of an oil spill from Eugene Island Block 317 is as follows. Also listed is the CGA Map Number corresponding to the land segment. This information will be utilized to determine environmentally sensitive areas that may be affected by a spill.

AREA	LAND SEGMENT CONTACT	CGA %	MAP NO.
Eugene Island 317	None		

Section V, Volume II of the CGA Manual containing maps as listed above, also includes equipment containment/cleanup protection response modes for the sensitive areas. Pollution response equipment available from CGA and its stockpile base is listed in the CGA Manual Volume I, Section III.

### QUANTITY, RATES OF DISCHARGE, AND COMPOSITION OF WASTES

### **Drilling Operations**

The anticipated discharge rates for drilling operations for Eugene Island Block 317 are listed below:

Drilling Fluids 2,769 bbls/month
Drill Cuttings 1,400 bbls/month
Deck Drainage 1,500 bbls/month
Sewage and Domestic Liquid Waste 2,000 gals/day\*

The quantity of discharge of cuttings is based on the average hole size for each section of hole. Mud may be discharged for purposes of dilution or at the end of the well. Fifty percent (50%) for attached liquids to cuttings is added to give a total drilling fluids discharge. Sewage is treated on location. Solid domestic wastes are transported to shore for proper disposal at an authorized disposal site.

The fluid used for drilling will be a typical lignosulfonate mud, unless otherwise noted in the drilling prognosis. Concentrations of the chemicals in the mud can be estimated from the daily fluids chemical inventory. Other surveillance of the fluid is accomplished by the monthly and end-of-well LC50 toxicity tests required by the EPA. A list of mud additives that may be used while conducting development drilling operations is enclosed.

In no instance will the drilling fluid discharge rate exceed 1,000 bbls/hour.

Any drilling fluid contaminated with oil will be transported to shore for proper disposal at an authorized disposal site.

<sup>\*</sup>Based on 50 gals/person/day with average 40 persons on board

### DRILLING MUD COMPONENTS

#### Trade Name

Bit Lube Export Calcium Chloride Caustic Soda Caustilig Cottonseed Hulls Defoam-X Desco Diaseal M Drispac

E.P. Lube EMI-153 Lube EMI-155 Spot

Ironite Spone Ken Cal-1 Ken Thin Kwik-Seal Lime Lube 153 Liquid CaCl,

M-I Bar M-I CMC

M-I Gel

M-I Mica Melanex-T My-Lo-Gel Nut Plug - All Grades Nut Shells Premium Gel

Quebracho 60/40 Resinex Resinex II SAPP Soda Ash Sodium Bicarbonate

Soltex Spersene Spersene CF Tannathin Versa Dril Versa Gel

#### Description

Lubricant Calcium Chloride Sodium Hydroxide Causticized Lignite Cottonseed Hulls Defoamer

Lignosulfonate Blend Diatomaceous Earth Polyanionic Cellulosic Polymer

Extreme Pressure Lubricant Lubricant

Fatty Acid Sulfonates and

asphalts Calcium Sulfate Iron Oxide Oil-wetting Agent Deflocculant Granules, flakes and fibers Calcium Hydroxide Lubricant

Barium Sulfate Sodium Carboxy-methyl cellulose

Calcium Chloride

Bentonite

Bentonite

Mica High-Temp Deflocculant Pro-Gelatinized Starch

Quebracho Hi-Temp Additive Hi-Temp Deflocculant Sodium Acid Pyrophosphate Sodium Carbonate Sodium Bicarbonate

Lubricant Chrome Lignosulfonate Non-Chrome Lignosulfoante Lignite Diesel Oii Invert System Organophilic Clay

### Primary Application

Lubricant Cement additive pH control Dispersant Lost circulation Defomaer Mud thinner Lost circulation Fluid loss control

Lubricant Lubricant Free stuck pipe

Calcium for gyp muds Hydrogen Sulfide Scavenger Wetting agent Deflocculant Lost circulation Lime muds Lubricant Control cement setting time Increase mud weight Fluid loss control

Viscosifier and fluid loss control Lost circulation Deflocculant Starch Muds Lost circuition Viscosity and filtration control Dispersant Dispersant Deflocculant Treat cement contamination Treat Calcium Sulfate Treat Calcium Sulfate and cement contamination Lubricant Dispersant Dispersant Dispersant Emulsifying mude

Emulsifying muds

### Trade Name

Versa HRP
Versa Lig
Versa Mod
Versa Mul
Versa SWA
Versa Thin
Versa Wet
Versa Clean
Versacoat
Versatrol
Versatrol
Versatrol HT
VG-69
XP 20

Aluminum Stearate

### Description

Liquid Complex Polymer
Lignite
Liquid Complex Polymer
Emulsifier package
Oil-wetting Agent
Deflocculant
Wetting Agent
Mineral Oil Invert System
Oil-Wetting Agent
Fluid Loss Reducer
Fluid Loss Reducer
Dry Complex Polymer
Chrome Lignite
Aluminum Stearate

### Primary Application

Oil base mud viscosifier
Dispersant
Oil base mud viscosifier
Emulsifying mud
Wetting agent
Defloculant
Wetting agent
Emulsifying muds
Wetting agent
Fluid loss control
Fluid loss control
Fluid loss control
Oil base mud viscosifier
Hi-temp mud dispersant
Defoamer

### H<sub>2</sub>S REPORT

Data pertaining to Eugene Island Block 317 has been evaluated and it is determined that this is not a block where the presence of H<sub>2</sub>S should be expected.

Well and seismic data (including conventional and 3-D) does not indicate the presence of salt diapers or layered evaporites on this lease. In addition, a review of available production from offsetting Eugene Island Blocks 308/315 (formerly FMI operated) and Eugene Island Blocks 305 and 306 do not indicate the presence of  $\rm H_2S$ .

We therefore request that this block be classified as one absent of H<sub>2</sub>S.

## Connor Consulting, Inc.

P.O. Box 218753 Houston, Texas 77218 (713) 558-0607 Fax: (713) 558-8369

09/10/92



### PROJECTED AIR EMISSION SCHEDULE FOR EXPLORATION PROJECT

### GENERAL INFORMATION

Location of Facility:

Eugene island Block 317

Name of Rig:

OCS-G 13625

Operator:

Jack-Up Freeport-McMoRan Oil & Gas Company

1615 Poydras Street

New Orleans, Louisiana 70112

Contact Person: Date Crilling Will Begin:

Ms. Julie Bowen

November 15, 1992

ways to Drill/Complete:

75 miles 180 days

Well Footage to be Drilled:

### MAJOR SOURCES (OFFSHORE)

Power used aboard drilling vessel; approximate footage to be drilled

Emitted	Projected Emissions	
Substance	lbs/day*	tons/yr
CO	169	15.172
SO2	54	4.827
NOx	792	71.262
VOC	64	5.747
TSP	56	5.057

Based on 60 hphr/ft. from Tabel 4-3, "Atmoshperic Emissions from Offshore Oil and Gas Development and Production", EPA No. 450/3-77-026, June, 1977

\*\* Emit sion fa 3.3.3-1, "Compilation of Air Pollutant Emission Fe on, EPA Report AP-42, August, 1977 Projected Air Emissions: Freeport-McMcRan Oil & Gas Company Eugene Island Block 317

### MINOR SOURCES (OFFSHORE)\*

Crew boats:	3 trips/week
Supply Boats:	3 trips/week
Helicopters:	7 trips/week
Emitted	Projected Emissions
Substance	lbs/day*tons/yr
	1992
co	1.035
SO2	0.032
NOx	0.165
VOC	0.097
TSP	0.045

\* Tables 3.2.1-3, 3.2.3-1 and 2.1-1, "Compilation of Air Pollutant Emission Factors", Third Edition, EPA Report AP-42, August, 1977.

### TOTAL ALL SOURCES (tons/year)

1992	CO	SO	NOx	VOC	TSP
Minor	15.172	4.827	71.262	5.747	5 007
Major	1.035	0.032	0.165	0.097	0.045
Total	16.207	4.860	71.427	5.844	5.102

### **ONSHORE SOURCES**

These should be about the same as minor sources unless new facilities are installed at the onshore base. No additional facilities are required or planned at this time.

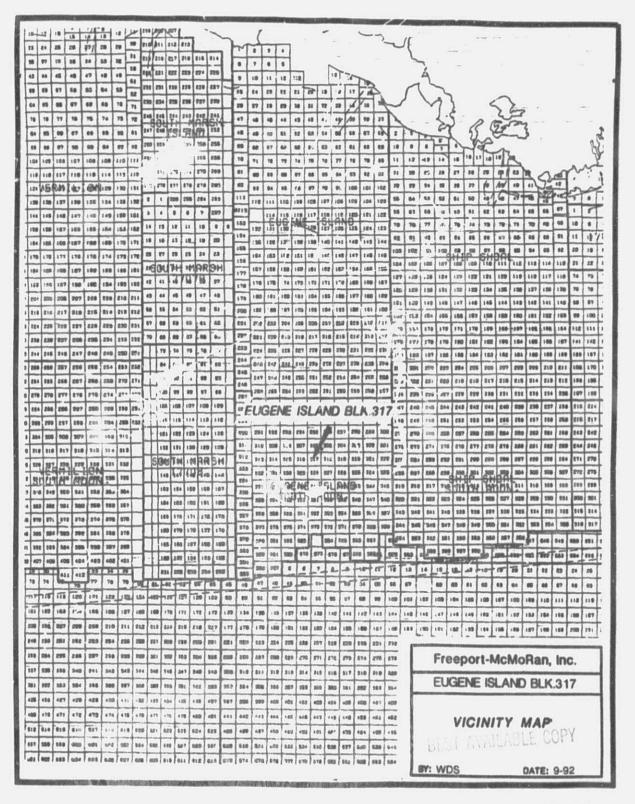
### **EMISSION EXEMPTION DETERMINATION**

For CO: E = 3400(D)2/3 = 3400(75)2/3 =	60,467 tons/year
For NOx, VOC, TSP & SO2: E = 33.3D = 33.3(75) =	2,498 tons/year

### FINDINGS OF AIR QUALITY REVIEW

As per DOI/MMS regulations, this facility is exempt form further air quality review as it has been determined that its operations will not have a significant adverse impact on air quality.

PAGE 2



# COASTAL ZONE MANAGEMENT CONSISTENCY CERTIFICATION

Exploration
Type of Plan

Eugene Island Block 317
Area and Block

OCS-G 13625 Lease Number

The proposed activities described in detail in this plan comply with Louisiana's approved Coastal Management Program(s) and will be conducted in a manner consistent with such Program(s). Also, a Public Notice will be publicized in the State Times and the Abbeville Meridional on September 28, 1992.

September 21 1992 Date



Freeport-McMoRan Oil & Gas Company A Division of Freeport-McMoRan 1615 Poydras Street New Orleans, LA 70112 P O Box 60004 New Orleans, LA 70160 Telephone 504-582-4000 Fax 504-582-4585

September 21, 1992

State-Times P.O. Box 588 Baton Rouge, LA 70821-0588

Attention: Ms. Vicki Thompson

Gentlemen:

Enclosed is a Public Notice which we request be published for one day only on September 28, 1992.

Please send an affidavit and the invoice to the following:

Freeport-McMoRan Inc. P.O. Box 60004 New Orleans, LA 70160 Attention: Mr. John Seip

Your assiclance in this matter will be appreciated.

Sincerely,

John Seip Supervisor,

Regulatory Affairs

/jb Enclosure

#### **PUBLIC NOTICE**

Public Notice of Federal Consistency review of a Plan of Exploration by the Coastal Management Section/Louisiana Department of Natural Resources for the plan's consistency with the Louisiana Coastal Resources Program.

Applicant: Freeport-McMoRan Inc.

P.O. Box 60004

New Orleans, LA 70160

Location: Eugene Island Block 317

OCS-G 13625

Description: Plan of Exploration is for the exploration of oil and gas. Activities will include

drilling from a typical jack-up drilling rig, transport of drilling crews and equipment by helicopter and/or cargo vessel from an onshore base located at Intracoastal City, Louisiana. No ecologically sensitive species or habitats

are expected to be located near or affected by these activities.

A copy of the plan described above is available for inspection at the Coastal Management Section Office located on the 10th Floor of the State Lands and Natural Resources Puilding, 625 North 4th Street, Baton Rouge, Louisiana. Office hours: 8:00 a.m. to 4:30 p.m., Monday through Friday. The public is requested to submit comments to the Coastal Management Section, Attention OCS Plans, P.O. Box 44396, Baton Rouge, LA 70804. Comments must be received within 15 days of the date of this notice for 15 days after the Coastal Management Section obtains a copy of the plan and it is available for public inspection. This public notice is provided to meet the requirements of the NOAA Regulations on Federal Consistency with approved Coastal Management Programs.



Freeport-McMoRan Oil & Gas Company A Division of Freeport-McMoRan 1615 Poydras Street New Orleans. LA 70112 P O Box 60004 New Orleans. LA 70160 Telephone 504-582-4000 Fax 504-582-4585

September 21, 1992

Abbeville Meridional P.O. Box 400 Abbeville, LA 70510

Attention: Legal Advertisements

Gentlemen:

Enclosed is a Public Notice which we request be published for one day only on September 28, 1992.

Please send an affidavit and the invoice to the following:

Freeport-McMoRan Inc. P.O. Box 60004 New Orleans, LA 70160 Attention: Mr. John Seip

Your assistance in this matter will be appreciated.

Sincerely,

John Seip Supervisor,

Regulatory Affairs

/jb Enclosure

#### PUBLIC NOTICE

Public Notice of Federal Consistency review of a Plan of Exploration by the Coastal Management Section/Louisiana Department of Natural Resources for the plan's consistency with the Louisiana Coastal Resources Program.

Applicant: Freeport-McMoRan Inc.

P.O. Box 60004

New Orleans, LA 70160

Location: Eugene Island Block 317

OCS-G 13625

Description: Plan of Exploration is for the exploration of oil and gas. Activities will include

drilling from a typical jack-up drilling rig, transport of drilling crews and equipment by helicopter and/or cargo vessel from an onshore base located at Intracoastal City, Louisian... No ecologically sensitive species or habitats

are expected to be located near or affected by these activities.

A copy of the plan described above is available for inspection at the Coastal Management Section Office located on the 10th Floor of the State Lands and Natural Resources Building, 625 North 4th Street, Baton Rouge, Louisiana. Office hours: 8:00 a.m. to 4:30 p.m., Monday through Friday. The public is requested to submit comments to the Coastal Management Section, Attention OCS Plans, P.O. Box 44396, Baton Rouge, LA 70804. Comments must be received within 15 days of the date of this notice for 15 days after the Coastal Management Section obtains a copy of the plan and it is available for public inspection. This public notice is provided to mest the requirements of the NOAA Regulations on Federal Consistency with approved Coastal Management Programs.

## INITIAL PLAN OF EXPLORATION ENVIRONMENTAL REPORT

Eugene Island Block 317
OCS-G 13825
OFFSHORE, LOUISIANA

September 14, 1392

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### I. DESCRIPTION OF PROPOSED ACTION

Freeport-McMoRan Inc. proposes to conduct exploratory activities within Eugene Island Block 317, Offshore, Louisiana.

As proposed, the Initial Plan of Exploration for Eugene Island Block 317 provides for the drilling of six (v) exploratory wells.

At this time, the planned commencement date for proposed activities is on or about November 15, 1992.

### A. DESCRIPTION OF PROPOSED TRAVEL MODES, ROUTES AND FREQUENCY

Support vessels will be dispatched from a support base located in Intracoastal City, Louisiana. The boats will normally move to the block via the most direct route from Intracoastal City, Louisiana; however, boats operating in the field may travel from other facilities nearby. Following is an estimate of trips to the proposed operation.

Crew Boat Supply Boat Helicopter 3 trips per week 3 trips per week 7 trips per week

### B. ONSHORE SUPPORT BASE

The proposed activities will utilize a support base located at Intracoastal City, Louisiana. This base provides 24-hour service, a radio tower with phone patch, dock space, office space, parking lot, equipment and supply storage space, drinking and drill water, etc. The proposed exploration activities will help to maintain this base at its present level of activity. No expansion of the physical facilities or the creation of new jobs is expected to result from the work planned in conjunction with this block.

The first socioeconomic data base report will be submitted when the MMS and the states of Alabama, Louisiana, and Mississippi identify the specific parameters to be addressed in these semi-annual reports.

### C. NEW OR UNUSUAL TECHNOLOGY

No new or unusual technology will be required for this operation.

### D. <u>VICINITY MAP</u>

Eugene Island Block 317 is located approximately 75 miles from the nearest Louisiana coastline. Water depths at the proposed surface locations range from 233' to 234'.

### II. DESCRIPTION OF AFFECTED ENVIRONMENT

### A. COMMERCIAL FISHING

The Gulf of Mexico provides 40% of the commercial fish landings and one-third of the recreational fishing activities in the continental U.S. Commercial landings of all fisheries in the Gulf during 1988 totaled nearly 1.9 billion pounds, valued at \$612 million. Cameron, Louisiana, was the second U.S. port in quantity of commercial fish landings in 1988, followed by Pascagoula, Mississippi, and Empire-Venice, Dulac-Chauvin, and Intracoastal City, Louisiana.

Louisiana ranked first among Gulf states in total commercial fishery landings for 1988 with hearly 1.4 billion pounds landed, valued at \$16.5 million. Nationally, the Louisiana catch ranked second in volume and third in value. Louisiana landed 44% of the shrimp, 75% of the oysters, 80% of the menhaden, and 68% of the blue crabs harventer from the Gulf in 1988. Menhaden represents the highest quantity with 1.1 billion pounds landed an prepresents the highest value with 65 million pounds landed, valued at \$150 million. In a seach of the following 11 species accounted for landings valued at over \$1 million: spotted seach of the following 11 species accounted for landings valued at over \$1 million: spotted seach of the following 11 species accounted for landings valued at over \$1 million: spotted seach of the following 11 species accounted for landings valued at over \$1 million: spotted seach of the following 11 species accounted for landings valued at over \$1 million: spotted seach of the following 11 species accounted for landings valued at over \$1 million: spotted seach of the following 11 species accounted for landings valued at over \$1 million: spotted seach of the following 11 species accounted for landings valued at over \$1 million: spotted seach of the following 11 species accounted for landings valued at over \$1 million: spotted seach of the following 11 species accounted for landings valued at over \$1 million: spotted seach of the following 11 species accounted for landings valued at over \$1 million: spotted seach of the following 11 species accounted for landings valued at over \$1 million spotted seach of the following 11 species accounted for landings valued at over \$1 million spotted seach of the following 11 species accounted for landings valued at over \$1 million spotted seach of the following 11 species accounted for landings valued at over \$1 million spotted seach of the following 11 species accounted for landings valued at over \$1 million spotted seach of the following 11 species accounted for lan

Louisiana is the most productive state in the Gulf of Mexico in terms of commercial fisheries because of its extensive estuaries, coastal marshes, and nutrient input from the Mississippi and Atchafalaya Rivers. Coastal Louisiana contains approximately 60% of the estuaries and marshes in the Gulf of Mexico. Over 90% of the blue crab harvest, which amounts to 50 million pounds, comes from estuary nursery areas.

#### B. SHIPPING

The establishment of a series of safety fairways or traffic separation schemes (TSS's), and anchorage areas provide unobstructed approach for vessels using U.S. ports. Shipping safety fairways are lanes or corridors in which no fixed structure, whether temporary or permanent, is permitted. TSS's increase navigation safety by separating opposing lanes of vessel traffic. Fairway anchorage are areas contiguous to and associated with a fairway, in which fixed structures may be permitted within certain spacing limitations.

Fairways play an important role in the avoidance of collisions on the OCS, particularly in the case of the large oceangoing vessels, but not all vessels stay within the fairways. Many others, so chi as fishing boats and OCS support vessels, travel through areas with high concentration of fixed structures. In such cases, the most important mitigation factor is the requirement for adequate marking and lighting of structures. After a structure has been in place for a while, it often becomes a landmark and an aid to navigation for vessels that operate in the area on a regular basis. Most ocean going vessels are equipped with radar capable of aiding navigation in all weather conditions. This has contributed to safe navigation in the OCS.

Eugene Island Block 317 is clear of all shipping fairways and anchorage areas. The drilling rig and each of the marine vessels servicing these operations will be equipped with all U.S. Coast Guard required navigational safety aids to alert ships of its presence in all weather conditions.

### C. PLEASURE BOATING. SPORT FISHING AND RECREATION

The northern Gulf of Mexico coastal zone is one of the major recreational regions of the United States, particularly in connection with marine fishing and beach-related activities. The coastal beaches, barrier islands, estuarine bays and sounds, river deltas, and tidal marshes are extensively and intensively utilized for recreational activity by residents of the Gulf South and tourists from throughout the National. Publicly owned and administered areas such as National seashores, parks, beaches, and wildlife lands, as well as specially designated preservation areas such as historic and natural sites and landmarks, wilderness areas, wildlife sanctuaries, and scenic rivers attract residents and visitors inhoughout the year. Commercial and private recreational facilities and establishments, such as a private recreational facilities and establishments, such as a private recreational gardens, also serve as primary interest areas a private for people who seek enjoyment from the recreational resources associated with the Gulf.

The two major recreational areas most directly associated with offshore leasing and potentially affected by it are the offshore marine environment and the coastal shorefront of the adjoining states are only major recreational activity occurring on the OCS is offshore marine recreational fishing and diving. Major sport species sought and caught offshore include snappers, groupers, seatrout, croekers, mackerels, amberiack, cobia, dolphin, tarpon, and billfishes. Studies, report, and conference proceedings published by the MMS and others have documented a substantial recreational fishery including scuba diving, directly associated with oil and gas production platforms. The recreational fishing associated with oil and gas structures stems from their function as high profile artificial fishing reefs. A report on the 1984 Marine Recreational Fishery Statistics Surveys presented by NMFS at the Sixty Annual Gulf of Mexico Information Transfer Meeting indicates a majority of the offshore recreational fishing in the Central and Western Gulf of Mexico is directly associated with the oil and gas structures. There are currently about 4,500 offshore oil and gas structures in the Central and Western Gulf of Mexico. Many other studies have demonstrated that when oil and gas structures are accessible to marine recreational fishermen and scuba divers, they are a major attraction for marine recreational activities and a positive influence on tourism and coastal economics. Throughout the Gulf of Mexico Region, there is high interest in acquiring, relocating, and retaining selected oil and gas structure in the marine environmental as dedicated artificial reefs to enhance marine fisheries when the structures are no longer useful for oil and gas production.

With the exception of Grand Isle and vicinity and a stretch of beach area in Cameron Parish, (Peveto/Constance/Ocean View Beaches, Holly Beach, Hackberry Beach) Louisiana has very limited beach area suitable for recreation. Most of it is very narrow, of poor recreational quality and generally inaccessible by automobile. Some of the highest quality beach areas in coastal Louisiana are found along the barrier islands chain off Terrebonne Parish. Several additional significant recreational resources are found along the Gulf Coast. Louisiana has ornamental gardens, scenic roads, rivers, and trails.

### D. POTENTIAL OR KNOWN CULTURAL RESOURCES

Archeological resources are any objects or features which are man-made or modified by human activity. Significant archeological resources are either historic or prehistoric and, as defined by 36 CFR 60.6, generally include properties greater than 50 years old which are associated with events that have made a significant contribution to the broad patterns of our history; are associated with the lives of persons significant in the past; embody the distinctive characteristics of a type, period, or method of construction; represent the work of a master; possess high artistic values; represent a significant and

distinguishable entity whose components may lack individual distinction; or have yielded, or may be likely to yield, information important in prehistory or history.

Geographic features that have high probability for associated prehistoric sites in the Central Gulf include barrier islands and backbarrier embayments, river channels and associated floodplans and terraces, and salt-dome features.

Freeport-McMoRan Inc. contracted John E. Chance and Associates, Inc. to perform a Hazard Study of Block 317, Eugene Island during July 25 and 26, 1992. Geophysical instruments used during the survey include an Airgun Profiler with 24 Channel Digital Recording System, 3.5 kHz Pinger Profiler, SMS-260 Side Scan Sonar, Proton Magnetometer and Echotrac Bathymetric System.

An Archaeological Report has been submitted for Eugene Island Block 317.

### E. ECOLOGICALLY SENSITIVE FEATURES

Barrier beaches are a common landform along the Gulf Coast and stretch in an irregular chain from Florida to Texas. These elongated, narrow landforms are composed of sand and other loose sediments transported by waves, currents, storm surges, and wind. Barrier landforms are a young coastal feature. The term "barrier" identifies the structure as one that protects other features, such as bays, estuaries, and marshes, from direct impacts of the open ocean. By separating coastal waters from the ocean, barriers contribute to the amount of estuarine habitat along the coast. As much as two-thirds of the top value Atlantic and Gulf Coast species of fish area considered to be directly dependent during some stage of their life on conditions in these estuaries.

Another benefit of both the island and their adjacent marshes and bays is that of providing habitats for a large number of birds and other animals, including several threatened or endangered species, for example, the loggerhead turtle, the southern bald eagle, alligators, and brown pelicans.

Louisiana has the most rapidly retreating beaches in the nation. The average retreat for the Fourchon beach over the last 100 years has been in excess of 60 ft/yr. The statewide average according to Dolan et al. (1982) is in excess of 12 ft/yr. Beaches along the deltaic plain in Louisiana fit into one of three categories, depending on the stage of the deltaic cycle that the landmass is experiencing. When a major distillutary of the Mississippi River is abandoned, subsidence results in a local seal level transgression that transforms the active delta into an erosional headland with flanking barriers. Fourthon Beach is an example of an eroding headland beach. With increased age and subsidence, the barrier shoreline evolves into a transgressive barrier island arc that is separated from the mainland by a lagoon. Isles Derniers is an example of this phenomenon. Eventually with continued subsidence and sediment deprivation, the island ceases to exist.

The importance of coastal wetlands to the coastal environment has been well documented. Coastal wetlands are characterized by high organic productivity, high detritus production, and efficient nutrient recycling. They provide habitat for a great number and wide diversity of invertebrates, fish, reptiles, birds, and mammals. Wetlands are particularly important as nursery grounds for juvenile forms of many important fish species. The Louisiana coastal wetlands support over two-thirds of the Mississippi Flyway wintering waterfowl population and the largest fur harvest in North America.

Louisiana contains most of the Gulf coastal wetlands. The deterioration of coastal wetlands, particularly in Louisiana, is an issue of concern. In Louisiana, the annual rate of wetlands loss has been measured at 130 km² for the period 1955-1978. Several factors contribute to wetlands loss in Coastal Louisiana, including sediment deprivation (a result of a 50% decrease in the suspended sediment load of the river since the 1950's and the channelization of the river, which has prevented overbank sediment deposition), subsidence and sea-level rise, and the construction of pipeline and navigation canals through the wetlands.

In Mississippi and Alabama, the mainland marshes behind Mississippi Sound occur as discontinuous wetlands associated with estuarine environments. The wetlands of Mississippi are more stable than those in Louisiana, reflecting the more stable substrate and more active sedimentation per unit of wetland areas. Most of the wetlands in Alabama occur on the Mobile River delta or along northern Mississippi Sound. On a percentage basis, wetlands loss has occurred more rapidly in Alabama during 1955 and 1979 than it did in Louisiana.

A recent study funded by MMS entitled "Causes of Wetland Loss in the Coastal Central Gulf of Mexico," examined coastal ecosystems of the Northern Gulf of Mexico region and how wetland habitats have changed as a result of natural processes and man's activities thereon. The study's primary focus was on assessing and quantifying the direct and indirect impacts of OCS-related activities on wetland areas. Canal construction for pipelines and navigation has been the major OCS-related impacting factor.

The shelf and shelf edge of the Central and Western Guif are characterized by topographic features is important because they support hard-bottom communities of high biomass, high diversity, and high numbers of plant and animal species; they support, either as shelter, food, or both, large numbers of commercially and recreationally important fishes; they are unique to the extent that they are small isolated areas of communities in the vast Gulf of Mexico; they provide a relatively pristine area suitable for scientific research; and they have an aesthetically attractive intrinsic value.

Live bottoms are regions of high productivity characterized by a firm substrate with high diversity or density of epibota. These communities are scattered across the west Florida shelf in the shallow waters with depth zonalion apparent in dominant communities, and within restricted regions of the Central Gulf of Mexico. Live bottoms also include biological assemblages consisting of sea fans, sea whips, hydroids, ascidians, or corals living upon and attached to naturally occurring hard or rocky formations with rough, broken or smooth topography; or areas whose lithotome favors the accumulation of turtles, fishes, soagrass, algae, and other fauna.

Chemosynthetic clams, mussels, and tube worms, similar to the hydrothermal vent communities of the eastern Pacific have been discovered in the deep waters of the Gulf and have been the subject of numerous MMS site-specific reviews. These cold-water communities are associated with seismic wipe-out zones and hydrocarbons-seep areas between water depths of 400 and 1000 meters.

Seven distinct biotic zones on the banks of the Gulf have been identified. None of the banks contain all of the seven zones. The Central Gulf of Mexico lists 16 topographic features. None of those listed are in or near the vicinity of the proposed operations in Eugene Island Block 317.

### F. PIPELINES AND CABLES

One (1) pipeline crosses Eugene Island Block 317: Pennzoil 14". As a prudent operator, Freeport-McMoRan Inc. will avoid all pipelines and/or cables in the vicinity of the proposed operations.

### G. OTHER MINERAL USES

The activities proposed for Eugene Island Block 317 will have no direct or indirect impact on other mineral uses.

### H. OCEAN DUMPING

Ocean dumping is prohibited in this area.

### I. ENDANGERED AND THREATENED SPECIES AND CRITICAL HABITAT

Although a large number of endangered and threatened species inhabit the Gulf Coast States and their adjoining waters, only a small percentage occupy coastal and marine habitats. An even smaller number are likely to be affected by OCS oil and gas exploration and production.

The Fish and Wildlife Service and the National Marine Fisheries Service have noted fourteen protected species, among them the seven whale species and one candidate species, the Gulf sturgeon have been selected for description and analysis because of the potential frequency or severity of their interactions with proposed OCS oil and gas development.

Five of the protected species -- the Alabama beach mouse, Perdido Key mouse, Mississippi sandhill crane, jaguarundi, and ocelot -- could be impacted only by onshore development because of their primary habitat is not on the OCS.

The Kemp's ridley sea turtle is the rarest of all the ma ine turtle species occurring in the northern Gulf of Mexico. Female Kemp's ridley sea turtles appear to inhabit nearshore areas, utilizing the littoral zone along the Gulf Coast. Congregations of female Kemp's have been recorded off the mouth of the Mississippi River.

The loggerhead sea turtle occurs throughout the world and is the most common marine turtle in the U.S. The majority of nesting in the Gulf of Mexico occurs in Florida from the Keys to Tampa Bay. Nesting has also been reported on Gulf Shore and Dauphin Island, Alabama and Ship Island, Mississippi. Chandeleur Islands off the Louisiana coast may be the most important nesting areas for the north arn Gulf of Mexico.

Six Federally listed endangered whale species have been reported in the Gulf of Mexico — the blue, fin, humpback, right, sie, and sperm whales. Generally, these large cetaceans inhabit the continental slope and deep oceanic waters; occasionally, they are sighted nearshore. Right whales are the most endangered cestacean in the Gulf of Mexico.

The piping plover is endangered in the Great Lakes watershed and threatened elsewhere. The largest numbers and highest densities of birds were found in the Western and Central Gulf of Mexico. The preferred feeding habits appear to be sandflats adjacent to passes and inlets, mudflats near sandy beaches, overwash candy mudflats, and barrier islands with overwash areas.

Brown pelicans remain listed as endangered in Mississippi, Louisiana and Texas. Nesting occurs in colonies on coastal islands. Three brown pelican rookeries occur in Louisiana and a small active rookery in Texas. Brown pelicans inhabit the coast, rarely venturing into freshwater or flying more then 32 km offshore.

The Eskimo curlew is one of the rarest native North American birds in the wild. Only 18 birds were reported between 1983-1987. Most of these sightings occur in coastal Texas. The birds migrate through and concentrate in the Gulf Coast marshes during the spring on their way from South America to Canada. The drastic population decline, which was first reported in the late 1800's, appears due to over harvest, habitat loss, and short-term climatic changes.

The whooping crane breeding population winters along the T from November to April. The birds occupy the coastal marshes along Texas guif ocast cour and a soft which are located in the Aransas National Wildlife Refuge.

A marine mammal, the West Indian manate. It is an equal and one of the five living species of the order Sirenia. It inhabits low-energy cosetal areas aroughout the northern Gulf of Mexico; however, it is known to winter only in south and central Florida.

The Gulf sturgeon -- a subspecies of the Atlanti regeon is mostly found along major rivers, estuaries, and offshore waters between the Mississippi in and the Suwannee River. It will be recommended for protection as a threatened species in early 1990.

### J. SOCICECONOMIC

The offshore oil exploration industry including oil companies, drilling contractors, and oilfield suppliers provide a major input to Louisiana's economy. A number of ports in the Central and Western Gulf have developed into important centers for offshore support. The most active of these in Louisiana are (from east to west) Venice, Morgan City, Intracoastal City, and Cameron, Louisiana. The onshore support base for operations in Eugene Island Block 317 is Intracoastal City, Louisiana.

### III. UNAVOIDABLE ADVERSE ENVIRONMENTAL EFFECTS

### A. WATER QUALITY

Operational discharges (drilling muds and cuttings, deck drainage and sanitary and domestic wastes) or accidental oil spills may temporarily degrece some measures of water quality adjacent to the proposed surface location. The impact level from these factors is considered to be low.

### B. <u>EFFECTS ON MARINE ORGANISMS</u>

Some organisms will be killed and some will be temporarily functionally impaired as a result of operational discharges. The most affected groups will be plankton and benthos immediately around the proposed surface locations. Damage will be both mechanical and toxicological. These impacts are considered to be localized, short term and reversible at the population level.

An oil spill could affect a broad spectrum of marine organisms. However, most effects would be localized and short term. Any effects on mammals and turtles would be significant.

### C. <u>EFFECTS ON THREATENED OR ENDANGERED SPECIES</u>

Anchoring, pipe and structure emplacement, dredging, operational discharges and some oil spill impacts will result in disturbances of the seagrass and benthic fauna and food sources utilized by these species. The impacts on these species is estimated to be moderate to low.

### D. WETLANDS AND BEACH

In the unlikely event of a spill occurring and reaching shore, organisms in wetland and beach habitats could be killed or functionally impaired. Human community disruption could also occur. Although all such effects would be localized, any effects on endangered species and/or critical habitats would be significant.

Marine debris education and training and several legal and operations changes affecting oil and gas operations are reducing accidental loss of solid waste from most offshore operations.

### E. AIR QUALITY

Air quality degradation may occur from onshore and offshore operational emissions as a result of drilling operations. The major impact producing factors on air quality from OCS-related activity are due to combustion, evaporation, or venting of hydrocarbons. The air quality at the lease site will be degraded temporarily during operations, as a result from support vessels (boats and helicopters). Anticipated emissions are expected to be below MMS guidelines limits and air quality should return to normal once operations are measurably completed. Offshore activities probably will not affect onshore air quality because of the distance between the structure and shore. Air quality at the onshore base will be only insignificantly reduced by onshore activities. Any such effect will be temporary.

### F. COMMERCIAL FISHING

The major impact producing factors on fishing activities from the proposed operations is structure placement, oil spills and underwater OCS obstructions such as pipelines and debris.

Oil spills that contact the coastal marshes, bays, estuaries, and open Gulf areas with high concentrations of floating eggs and larvae have the greatest potential for damage to commercial fisheries. The majority of the Gulf's fishes are estuarine dependent. An oil spill could seriously affect

commercial fisheries such as menhaden, shrimp, and blue crab that use these areas as nursery or spawning grounds.

The emplacement of one structure eliminates approximately 9 acres of commercial trawling space, and underwater OCS obstructions cause gear conflicts which result in such losses as trawls, shrimp catch, business downtime, and vessel damage.

Commercial fishery resources may also be affected by the discharge of drilling muds which may contain material toxic to marine fishes; however, this is only at concentrations four to five orders of magnitude higher than those found more than a few meters from the discharge point. Further dilution is extremely rapid in offshore waters.

In conclusion, although these factors impact the commercial fisheries industries, the level of impact is expected to be very negligible.

### G. SHIP NAVIGATION

Very little interference can be expected between the drilling unit, structures and marir e vessels utilized during development operations and ship that use established fairways. However, at hight and during rough weather, fog, and heavy seas, ships not using established fairways could collide with the structures. Approved aids to navigation will be installed on the drilling rig and all marine vessels servicing these operations in accordance USCG regulations.

### H. CULTURAL RESOURCES

The greatest impact to a historic and/or prehistoric cultural resource as a result of the proposed action would result from a contact between an OCS offshore activity (drilling rig emplacement) and a historic shipwreck and/or prehistoric site located on the OCS.

The cultural resource surveys required prior to an operator beginning oil and gas activities in a lease block are estimated to be 90 percent effective as identifying possible sites.

There is only a small probability that an unknown cultural resource exists in the lease area.

### I. RECREATION AND AESTHETIC VALUES

The drilling rig and marine vessels may represent an obstacle to some sport fisherman, but such an effect is expected to be negligible and not permanent.

Even though existing regulations and orders prohibit indiscriminate littering of the marine environment with trash. If shore oil and gas operations involving men, machines, equipment, and supplies is bound to result in some littering of the ocean. Human nature and accidents associated with offshore operations will contribute some floatable debris to the ocean environment which will eventually come ashore on major recreational beaches.

The effects that normal operations or a minor oil spill would have on any fish stocks important to sport fishermen are also considered to be negligible.

A minor oil spill and/or non-petroleum floating debris could foul beaches inshore of the lease area. The fouling of the beaches would be an aesthetic detriment that could adversely affect recreation. Any effects on each recreation could adversely affect tourism, and consequently, the local economy.

### IV. SUMMARY

The proposed activity will be carried out and completed with the guarantee of the following items:

- A. The best available and safest technologies will be utilized throughout the project. This includes meeting all applicable requirements for equipment types, general project layout, safety systems, and equipment and monitoring systems.
- B. All operations are covered by a Minerals Management Service approved Oil Spill Contingency Plan.
- C. All applicable Federal, State, and Local requirements regarding air emission and water quality and discharge for the proposed activities, as well as any other permit conditions, will be complied with.
- D. The proposed activities described in detail in the Initial Plan of Exploration will comply with Louisiana's Coastal Management Program and will be conducted in a manner consistent with such program.

### REFERENCES

- Final Environmental Impact Stc. ament, Proposed Oil and Gas Lease Sales 110 and 112, Gulf of Mexico OCS Region, OCS EIS, MMS 86-0087.
- Final Environmental Impact Statement, Proposed Gli and Gas Lease Sales 110 and 112, Gulf of Mexico OCS Region, OCS EIS, MMS 86-0087, visuais.
- Final Environmental Impact Statement, Proposed Oil and Gas Lease Sales 113, 115, and 116, Gulf of Mexico OCS Region, OCS EIS, MMS 87-0077.
- Final Environmental Impact Statement, Proposed Oil and Gas Lease Sales 118 and 122, Gulf of Mexico OCS Region, OCS EIS, MMS 88-0044.
- Final Environmental Impact Statement, Proposed Oil and Gas Lease Sales 123 and 125, Gulf of Mexico OCS Region, OCS EIS, MMS 89-0053.
- Final Environmental Impact Statement, Proposed Oil and Gas Lease Sales 131, 135 and 137, Gulf of Mexico OCS Region, OCS EIS, MMS 90-0042.