UNITED STATES MEMORANDUM	GOVERNM	ENT April 20, 2005
То:	Publi	c Information (MS 5034)
From:	Plan 5231)	Coordinator, FO, Plans Section (MS
Subject:	Publi	c Information copy of plan
Control #	-	S-06662
Туре	-	Supplemental Development Operations Coordinations Document
Lease(s)	-	OCS- 00228 Block - 93 Eugene Island Area
Operator	-	Apache Corporation
Description	-	platform and Caisson No.014
Rig Type	-	JACKUP

Attached is a copy of the subject plan.

It has been deemed submitted as of this date and is under review for approval.

Robert Stringfelder Plan Coordinator

Site Type/Name	Botm Lse/Area/Blk	Surface Location	Surf Lse/Area/Blk
WP/NO. 014		2079 FNL, 2511 FEL	00228/EI/93
WELL/NO 014	00228/EI/93	2079 FNL, 2511 FEL	00228/EI/93

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# **PUBLIC COPY**

ANANAGEMENT

April 15, 2005

#### SUPPLEMENTAL DEVELOPMENT OPERATIONS COORDINATION DOCUMENT .

Lease Number (s):

Area/Block:

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**Prospect Name:** 

Submitted by:

Eugene Island Block 93

Not Applicable

OCS 00228

Offshore:

Louisiana	SALS WININGLINEIV/ SEA	
Douisiuna	HINERALS WAARDEWEN SERVICE	
	APR 1 8 2005	
	FIELD OPERATIONS OPERATIONS OPERATIONS	/
Apache Corp	Oration, GOM OCS Region, New C	
2000 Post Oa	k Boulevard	
Suite 100		
Houston, Tex	as 77056	

CONTROL No.\_ -666 **REVIEWER: Robert Stringfellow** PHONE: (504) 736-2437

David Vasseur (713) 296-6000

Estimated start up date: June 1, 2005

Authorized Representative: Cheryl Powell J. Connor Consulting, Inc. 16225 Park Ten Place, Suite 700 Houston, Texas 77084 (281) 578-3388 cheryl.powell@jccteam.com

# No. Copies Being Submitted:

Proprietary:	5	
Public Info:	3	

For MMS:	
Plan No.	
Assigned to:	

#### **APACHE CORPORATION**

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#### SUPPLEMENTAL

# **DEVELOPMENT OPERATIONS COORDINATON DOCUMENT**

#### LEASE OCS 00228

#### **EUGENE ISLAND BLOCK 93**

Contents of Plan APPENDIX A APPENDIX B General Information Geological, Geophysical & H<sub>2</sub>S Information APPENDIX C Biological and Physical Information APPENDIX D Wastes and Discharge Information APPENDIX E APPENDIX F Oil Spill Information APPENDIX G Air Emissions Information APPENDIX H Environmental Impact Analysis Coastal Zone Management Consistency Information APPENDIX I APPENDIX J Plan Information Form

# APPENDIX A CONTENTS OF PLAN

Apache Corporation (Apache) is the designated operator of the subject oil and gas lease.

## (A) DESCRIPTION, OBJECTIVES AND SCHEDULE

This DOCD provides for the installation of a lease term pipeline, installation of the deck over Caisson No. 014 and commencement of production for Well No. 014. The drilling and completion of Well No. 014 was previously permitted under the existing EP.

Appendix J contains an Plan Information Form, which provides a description of proposed activities, and a tentative schedule.

## (B) LOCATION

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Included as *Attachment A-1* is a map showing the existing location of the well and facilities. A bathymetry map was previously submitted. Additional well information is included in Appendix J, on the Plan Information Form.

## (C) DRILLING UNIT

Not applicable

## (D) PRODUCTION FACILITIES

The subject well will be protected by a well protector structure designated as Caisson No. 014. Caisson No. 014 will be installed under the approved EP. A schematic of the proposed structure is included as *Attachment A-2*.

Apache anticipates installing minimal processing equipment on this structure. All hydrocarbon handling equipment installed for testing and production operations will be designed, installed and operated to prevent pollution.

The caisson will be installed utilizing a drilling rig as addressed in the previously approved EP. The deck will be installed utilizing a lift boat.

A lease term pipeline will be installed to transport produced hydrocarbons from the subject structure to the existing A platform in Eugene Island Block 95. No new nearshore or onshore pipelines or facilities will be constructed.

The facility will be designed, installed and operated in accordance with current regulations, engineering documents incorporated by reference, and indusiry practice in order to ensure protection of personnel, environment and the facilities. When necessary, maintenance or repairs that are necessary to prevent pollution of offshore waters shall be undertaken immediately.



**Attachment A-1** 



C:\CURRENT PROJECTS\APACHE\EUGENE ISLAND 93 BLOCK 14\(ASN 00X) STRUCTURAL PERMITS\5634MMS-IT.DWG, 2/25/2005 12:50:35 PM, \\ATLAS04\H

# APPENDIX B GENERAL INFORMATION

## (A) CONTACT

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Inquiries may be made to the following authorized representative:

Cheryl Powell J. Connor Consulting, Inc. 16225 Park Ten Place, Suite 700 Houston, Texas 77084 (281) 578-3388 <u>E-mail address: cheryl.powell@jccteam.com</u>

(B) PROJECT NAME

Not Applicable.

(C) PRODUCTION RATES AND LIFE OF RESERVOIR Proprietary Data

# (D) NEW OR UNUSUAL TECHNOLOGY

Proprietary Data

# (E) BONDING INFORMATION

The bond requirements for the activities and facilities proposed in this DOCD are satisfied by an area wide bond, furnished and maintained according to 30 CFR 256, subpart I; NTL No. N2000-G16, "Guidelines for General Lease Surety Bonds", dated September 7, 2000.

### (F) ONSHORE BASE AND SUPPORT VESSELS

A Vicinity Map is included as *Attachment B-1* showing Eugene Island Block 93 located approximately 30 miles from the nearest shoreline and approximately 95 miles from the onshore support base in Fourchon, Louisiana.

The existing onshore base provides 24-hour service, a radio tower with a phone patch, dock space, equipment, and supply storage area, drinking and drill water, etc. The base serves as a loading point for tools, equipment, and machinery, and temporary storage for materials and equipment. The base also supports crew change activities. The proposed operations do not require expansion or major modifications to the base.

During the proposed activities, support vessels/helicopters and travel frequency are as follows:

Туре	Weekly Estimate (No.) of Roundtrips Production Operations
Crew Boat	1
Supply Boat	1
Helicopter	1

The most practical, direct route from the shorebase as permitted by the weather and traffic conditions will be utilized.

## (G) LEASE STIPULATIONS

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The following lease stipulations are attached to OCS 00228, Eugene Island Block 93.

## **<u>1. Military Warning Area (MWA)</u>**

Eugene Island Block 93 is located within designated MWA W-59BC. The Naval Air Station will be contacted in order to coordinate and control the electromagnetic emissions during the proposed operations.

# SPECIAL CONDITIONS

Apache will operate in accordance with NTL 2003-G10, to minimize the risk of vessel strikes to protected species and report observations of injured or dead protected species, and NTL 2003-G11 to prevent intentional and/or accidental introduction of debris into the marine environment.

## ARCHAEOLOGY SURVEY BLOCKS

Eugene Island Block 93 has been determined as potentially containing prehistoric archaeological properties.

Review of the data obtained during the shallow hazard study does not indicate the presence of any historic period shipwrecks.

# (H) RELATED OCS FACILITIES AND OPERATIONS

A single well protector structure will be installed over the surface location of Well No. 014. Produced hydrocarbons will flow via a proposed 4.5" lease pipeline to the existing A platform in Eugene Island Block 95.

### (I) TRANSPORTATION INFORMATION

As stated above, a proposed lease pipeline will be installed. Production from the EI 93 Caisson No. 14 will flow full well stream via a proposed 4.5" inch bulk gas pipeline (Segment No. 15089) to the EI 95 A platform for processing. Processed production will depart the A platform via GulfSouth Pipeline, LP's existing 10-inch pipeline (Segment No. 10826) for ultimate delivery into the GulfSouth Pipeline Terminal in Burns Point, Louisiana (Operations System 23.1).



ATTACHMENT B-1

# APPENDIX C GEOLOGICAL, GEOPHYSICAL, AND H<sub>2</sub>S INFORMATION

### (A) STRUCTURE CONTOUR MAPS Proprietary Data

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(B) TRAPPING FEATURES – Proprietary Data

(C) DEPTH OF GEOPRESSURE – Proprietary Data

(D) INTERPRETED 2-D AND/OR 3-D SEISMIC LINES Proprietary Data

(E) GEOLOGICAL STRUCTURE CROSS-SECTIONS Proprietary Data

(F) SHALLOW HAZARDS REPORT Proprietary Data

(G) SHALLOW HAZARDS ASSESSMENT Proprietary Data

(H) HIGH-RESOLUTION SEISMIC LINES Proprietary Data

(I) STRATIGRAPHIC COLUMN Proprietary Data

(J) HYDROGEN SULFIDE INFORMATION Proprietary Data

# APPENDIX D BIOLOGICAL AND PHYSICAL INFORMATION

### CHEMOSYNTHETIC INFORMATION

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This DOCD does not propose activities that could disturb seafloor areas in water depths of 400 meters (1312 feet) or greater, therefore chemosynthetic information is not required.

### TOPOGRAPHIC FEATURES INFORMATION

The activities proposed in this plan will not take place within 500 feet of any identified topographic feature, therefore topographic features information is not required.

### LIVE BOTTOM (PINNACLE TREND) INFORMATION

Eugene Island Block 93 is not located within 100 feet of any pinnacle trend feature with vertical relief equal to or greater than 8 feet; therefore, live bottom information is not required.

# APPENDIX E WASTES AND DISCHARGES INFORMATION

### DISCHARGES

All discharges associated with operations proposed in this Development Operation Coordination Document will be in accordance with regulations implemented by Minerals Management Service (MMS), U. S. Coast Guard (USCG) and the U.S. Environmental Protection Agency (EPA).

Discharge information is not required per NTL No. 2003-G17.

### WASTES

For disposed wastes, the type and general characteristics of the wastes, the amount to be disposed of (volume, rate, or weight), the daily rate, the name and location of the disposal facility, a description of any treatment or storage, and the methods for transporting and final disposal are provided in tabular format in *Attachment E-1*. For purposes of this Appendix, disposed wastes describes those wastes generated by the proposed activities that are disposed of by means other than by releasing them in to the waters of the Gulf of Mexico at the site where they are generated. These wastes can be disposed of by offsite release, injection, encapsulation, or placement at either onshore or offshore permitted locations for the purpose of returning them back to the environment.

# Disposal Table Example (Wastes to be disposed of, not discharged)

Type of Waste	Amount*	Rate per Day	Name/Location of	Treatment and/or Storage,
Approximate			Disposal Facility	Transport and Disposal
Composition				Method
Waste Oil	2 bbl/yr	2 bbl/ 30days	Chemical Waste Management; Carlyss, LA	Pack in drums and transport to an onshore Incineration site
Trash and debris	2700 ft <sup>3</sup>	90 ft <sup>3</sup> /day	Chemical Waste Management; Carlyss, LA	Transport in storage bins on crew boat to shorebase; truck to landfill

\*can be expressed as a volume, weight, or rate

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# APPENDIX F OIL SPILL INFORMATION

### 1. SITE-SPECIFIC OSRP

N/A

### 2. REGIONAL OSRP INFORMATION

Apache 's Regional Oil Spill Response Plan (OSRP) was approved on November 5, 2003 and most recently updated on January 12, 2005. Activities proposed in this DOCD will be covered by the Regional OSRP.

### 3. OSRO INFORMATION

Apache's primary equipment provider is Clean Gulf Associates (CGA). The Marine Spill Response Corporation's (MSRC) STARS network will provide closest available personnel, as well as an MSRC supervisor to operate the equipment.

### 4. WORST-CASE SCENARIO COMPARISON

Category	Regional OSRP WCD	DOCD WCD
Type of Activity	Production	Production
Facility Location (Eugene Island Block 93)	MP 140	EI 93
Facility Designation	В	EI 93 #14
Distance to Nearest Shoreline (miles)	12	30
Volume Storage tanks (total) Flowlines (on facility) Lease pipelines Uncontrolled blowout Total Volume Type of Oil(s)	5625 1325 <u>1500</u> 8450	N/A N/A 275 <u>500</u> 775
(crude, condensate, diesel)	Crude	Condensate
API Gravity	30°	45°

Apache has determined that the worst-case scenario from the activities proposed in this DOCD does not supercede the worst-case scenario from our approved regional OSRP.

# 5. FACILITY TANKS, PRODUCTION VESSELS

All facility tanks of 25 barrels or more.

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Type of Storage Tank	Type of Facility	Tank Capacity (bbls)	Number of Tanks	Total Capacity (bbls)	Fluid Gravity (API)
Production	N/A	N/A	N/A	N/A	N/A

# **APPENDIX G AIR EMISSIONS INFORMATION**

### AIR EMISSIONS INFORMATION (If any of these answers are "yes" - the spreadsheets need to be submitted)

Screening Questions for DOCD's	Yes	No
Is any calculated Complex Total (CT) Emission amount (tons) associated with your proposed exploration activities more than 90% of the amounts calculated using the following formulas: $CT = 3400D^{2/3}$ for CO, and $CT = 33.3D$ for the other air pollutants (where D =		Х
distance to shore in miles)?		NZ
Do your emission calculations include any emission reduction measures or modified emission factors?		Х
Does or will the facility complex associated with your proposed development and production activities process production from eight or more wells?		Х
Do you expect to encounter $H_2S$ at concentrations greater than 20 parts per million (ppm)?		Х
Do you propose to flare or vent natural gas in excess of the criteria set forth under $250.1105(a)(2)$ and $(3)$ ?		Х
Do you propose to burn produced hydrocarbon liquids?		Х
Are your proposed development and production activities located within 25 miles from shore?		Х
Are your proposed development and production activities located within 200 kilometers of the Breton Wilderness Area?		Х

### **Summary Information**

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There are no existing facilities or activities co-located with the currently proposed activities, therefore the Complex Total Emissions are the same as the Plan Emissions and are provided in the table below.

Air Pollutant	Plan Emission Amounts <sup>1</sup> (tons)	Calculated Exemption Amounts <sup>2</sup> (tons)	Calculated Complex Total Emission Amounts <sup>3</sup> (tons)
Carbon Monoxide (CO)	4.55	999.00	4.55
Particular matter (PM)	0.61	999.00	0.61
Sulphur dioxide (SO <sub>2</sub> )	2.79	999.00	2.79
Nitrogen oxides (NO <sub>x</sub> )	20.87	999.00	20.87
Volatile organic compounds (VOC)	1.72	32826.64	1.72

<sup>1</sup>For activities proposed in your DOCD, list the projected emissions calculated from the worksheets. <sup>2</sup>List the exemption amounts for your proposed activities calculated by using the formulas in 30 CFR 250.303(d). <sup>3</sup>List the complex total emissions associated with your proposed activities calculated from the worksheets.

## This information was calculated by: Cheryl Powell (281) 578-3388 cheryl.powell@jccteam.com

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Based on this data, emissions from the proposed activities will not cause any significant effect on onshore air quality.

# APPENDIX H ENVIRONMENTAL IMPACT ANALYSIS (EIA)

# **Apache Oil Corporation (Apache)**

# Supplemental Development Operations Coordination Document Eugene Island Block 93 OCS-G 00228

## (A) Impact Producing Factors

### ENVIRONMENTAL IMPACT ANALYSIS WORKSHEET

Environment Resources	Impact Producing Factors (IPFs) Categories and Examples Refer to recent GOM OCS Lease Sale EIS for a more complete list of IPFs						
	Emissions (air, noise, light, etc.)	Effluents (muds, cutting, other discharges to the water column or seafloor)	Physical disturbances to the seafloor (rig or anchor emplacements, etc.)	Wastes sent to shore for treatment or disposal	Accidents (e.g., oil spills, chemical spills, H <sub>2</sub> S releases)	Discarded Trash & Debris	
Site-specific at Offshore Location			· · · · · · · · · · · · · · · · · · ·		<u> </u>		
Designated topographic features		(1)	(1)		(1)		
Pinnacle Trend area live bottoms		(2)	(2)		(2)		
Eastern Gulf live bottoms		(3)	(3)		(3)		
Chemosynthetic communities			(4)				
Water quality			X		X		
Fisheries			X		X		
Marine Mammals	X(8)				X(8)	X	
Sea Turtles	X(8)				X(8)	Х	
Air quality	X(9)						
Shipwreck sites (known or potential)			X(7)				
Prehistoric archaeological sites			X(7)		X		
Vicinity of Offshore Location							
Essential fish habitat			Х		X(6)		
Marine and pelagic birds	Х				Х	Х	
Public health and safety					(5)		
Coastal and Onshore							
Beaches					X(6)	Х	
Wetlands					X(6)		
Shore birds and coastal nesting birds					X(6)	Х	
Coastal wildlife refuges					х		

Apache Corporation Supplemental DOCD Eugene Island Block 93 (OCS 00228) Page H-1 April 15, 2005

Wilderness areas			Х	

### Footnotes for Environmental Impact Analysis Matrix

- 1) Activities that may affect a marine sanctuary or topographic feature. Specifically, if the well or platform site or any anchors will be on the seafloor within the:
  - o 4-mile zone of the Flower Garden Banks, or the 3-mile zone of Stetson Bank;
  - o 1000 m, 1-mile or 3-mile zone of any topographic feature (submarine bank) protected by the Topographic Features Stipulation attached to an OCS lease;
  - o Essential Fish Habitat (EFH) criteria of 500 ft. from any no-activity zone; or
  - Proximity of any submarine bank (500 ft. buffer zone) with relief greater than 2 meters that is not protected by the Topographic Features Stipulation attached to an OCS lease.
- 2) Activities with any bottom disturbance within an OCS lease block protected through the Live Bottom (Pinnacle Trend) Stipulation attached to an OCS lease.
- 3) Activities within any Eastern Gulf OCS block where seafloor habitats are protected by the Live Bottom (Low-Relief) Stipulation attached to an OCS lease.
- 4) Activities on blocks designated by the MMS as being in water depths 400 meters or greater.
- 5) Exploration or production activities where H2S concentrations greater than 500 ppm might be encountered.
- 6) All activities that could result in an accidental spill of produced liquid hydrocarbons or diesel fuel that you determine would impact these environmental resources. If the proposed action is located a sufficient distance from a resource that no impact would occur, the EIA can note that in a sentence or two.
- 7) All activities that involve seafloor disturbances, including anchor emplacements, in any OCS block designated by the MMS as having high-probability for the occurrence of shipwrecks or prehistoric sites, including such blocks that will be affected that are adjacent to the lease block in which your planned activity will occur. If the proposed activities are located a sufficient distance from a shipwreck or a prehistoric site that no impact would occur, the EIA can note that in a sentence or two.
- 8) All activities that you determine might have an adverse effect on endangered or threatened marine mammals or sea turtles or their critical habitats.
- 9) Production activities that involve transportation of produced fluids to shore using shuttle tankers or barges.

## (B) Analysis

### Site-Specific at Eugene Island Block 93

Proposed operations consist of the installation of a lease term pipeline and commencement of production for Well No.014..

#### 1. Designated Topographic Features

Potential IPFs on topographic features include physical disturbances to the seafloor and accidents.

**Physical disturbances to the seafloor and effluents:** Eugene Island Block 93 is 65 miles from the closest designated Topographic Features Stipulation Block (Fishnet Bank); therefore, no adverse impacts are expected.

Accidents: It is unlikely that an accidental surface or subsurface spill would occur from the proposed activities (refer to statistics in Item 5, Water Quality). Oil spills cause damage to benthic organisms only if the oil contacts the organisms. Oil from a surface spill can be driven into the water column; measurable amounts have been documented down to a 10 m depth. At this depth, the oil is found only at concentrations several orders of magnitude lower than the amount shown to have an effect on corals. Because the crests of topographic features in the Northern Gulf of Mexico are found below 10 m, no oil from a surface spill could reach their sessile biota. Oil from a subsurface spill is not applicable due to the distance of these blocks from a topographic area. The activities proposed in this plan will be covered by Apache's Regional OSRP (refer to information submitted in Appendix F).

There are no other IPFs (including emissions, effluents and wastes sent to shore for disposal) from the proposed activities, which could impact topographic features.

### 2. Pinnacle Trend Area Live Bottoms

Potential IPFs on pinnacle trend area live bottoms include physical disturbances to the seafloor and accidents.

**Physical disturbances to the seafloor and effluents:** Eugene Island Block 93 is 200 miles from the closest live bottom (pinnacle trend) area; therefore, no adverse impacts are expected.

Accidents: It is unlikely that an accidental surface or subsurface spill would occur from the proposed activities (refer to statistics in Item 5, Water Quality). Oil spills have the potential to foul benthic communities and cause lethal and sublethal effects on live bottom organisms. Oil from a surface spill can be driven into the water column; measurable amounts have been documented down to a 10 m depth. At this depth, the oil is found only at concentrations several

Page H-3 April 15, 2005 orders of magnitude lower than the amount shown to have an effect on marine organisms. Oil from a subsurface spill is not applicable due to the distance of these blocks from a live bottom (pinnacle trend) area. The activities proposed in this plan will be covered by Apache's Regional OSRP (refer to information submitted in **Appendix F**).

There are no other IPFs (including emissions, effluents and wastes sent to shore for disposal) from the proposed activities which could impact a live bottom (pinnacle trend) area.

### 3. Eastern Gulf Live Bottoms

Potential IPFs on Eastern Gulf live bottoms include physical disturbances to the seafloor and accidents.

**Physical disturbances to the seafloor and effluents:** Eugene Island Block 93 is not located in an area characterized by the existence of live bottoms, and this lease does not contain a Live-Bottom Stipulation requiring a photo documentation survey and survey report.

Accidents: It is unlikely that an accidental surface or subsurface spill would occur from the proposed activities (refer to statistics in Item 5, Water Quality). Oil spills cause damage to live bottom organisms only if the oil contacts the organisms. Oil from a surface spill can be driven into the water column; measurable amounts have been documented down to a 10 m depth. At this depth, the oil is found only at concentrations several orders of magnitude lower than the amount shown to have an effect on marine invertebrates. Oil from a subsurface spill is not applicable due to the distance of these blocks from a live bottom area. The activities proposed in this plan will be covered by Apache's Regional OSRP (refer to information submitted in Appendix F).

There are no other IPFs (including emissions, effluents and wastes sent to shore for disposal) from the proposed activities which could impact an Eastern Gulf live bottom area.

#### 4. Chemosynthetic Communities

There are no IPFs (including emissions, physical disturbances to the seafloor, wastes sent to shore for disposal, or accidents) from the proposed activities that could cause impacts to chemosynthetic communities.

Operations proposed in this plan are in water depths of 23 feet. High-density chemosynthetic communities are found only in water depths greater than 1,312 feet (400 meters); therefore, Apache's proposed operations in Eugene Island Block 93 would not cause impacts to chemosynthetic communities.

### 5. Water Quality

IPFs that could result in water quality degradation from the proposed operations in Eugene Island Block 93 include disturbances to the seafloor, and accidents.

**Physical disturbances to the seafloor:** Bottom area disturbances resulting from the emplacement of drill rigs, the drilling of wells and the installation of platforms and pipelines would increase water-column turbidity and re-suspension of any accumulated pollutants, such as trace metals and excess nutrients. This would cause short-lived impacts on water quality conditions in the immediate vicinity of the emplacement operations.

Accidents: Oil spills have the potential to alter offshore water quality; however, it is unlikely that an accidental surface or subsurface spill would occur from the proposed activities. Between 1980 and 2000, OCS operations produced 4.7 billion barrels of oil and spilled only 0.001 percent of this oil, or 1 bbl for every 81,000 bbl produced. The spill risk related to a diesel spill from drilling operations is even less. Between 1976 and 1985, (years for which data were collected), there were 80 reported diesel spills greater than one barrel associated with drilling activities. Considering that there were 11,944 wells drilled, this is a 0.7 percent probability of an occurrence. If a spill were to occur, the water quality of marine waters would be temporarily affected by the dissolved components and small oil droplets. Dispersion by currents and microbial degradation would remove the oil from the water column and dilute the constituents to background levels. Historically, changes in offshore water quality from oil spills have only been detected during the life of the spill and up to several months afterwards. Most of the components of oil are insoluble in water and therefore float. The activities proposed in this plan will be covered by Apache's Regional Oil Spill Response Plan (refer to information submitted in **Appendix F**).

There are no other IPFs (including emissions, physical disturbances to the seafloor, effluents and wastes sent to shore for disposal) from the proposed activities which could cause impacts to water quality.

### 6. Fisheries

IPFs that could cause impacts to fisheries as a result of the proposed operations in Eugene Island Block 93 include physical disturbances to the seafloor, and accidents.

**Physical disturbances to the seafloor:** The emplacement of a structure or drilling rig results in minimal loss of bottom trawling area to commercial fishermen. Pipelines cause gear conflicts which result in losses of trawls and shrimp catch, business downtime, and vessel damage. Most financial losses from gear conflicts are covered by the Fishermen's Contingency Fund (FCF). The emplacement and removal of facilities are not expected to cause significant adverse impacts to fisheries.

Accidents: An accidental oil spill has the potential to cause some detrimental effects on fisheries; however, it is unlikely that such an event would occur from the proposed activities (refer to Item 5, Water Quality). The effects of oil on mobile adult finfish or shellfish would likely be sublethal and the extent of damage would be reduced to the capacity of adult fish and shellfish to avoid the spill, to metabolize hydrocarbons, and to excrete both metabolites and parent compounds. The activities proposed in this plan will be covered by Apache's Regional OSRP (refer to information submitted in Appendix F).

There are no IPFs from emissions, effluents or wastes sent to shore for disposal from the proposed activities which could cause impacts to fisheries.

### 7. Marine Mammals

GulfCet II studies revealed that cetaceans of the continental shelf and shelf-edge were almost exclusively bottlenose dolphin and Atlantic spotted dolphin. Squid eaters, including dwarf and pygmy killer whale, Risso's dolphin, rough-toothed dolphin, and Cuvier's beaked whale, occurred most frequently along the upper slope in areas outside of anticyclones. IPFs that could cause impacts to marine mammals as a result of the proposed operations in Eugene Island Block 93 include emissions, discarded trash and debris, and accidents.

**Emissions:** Noises from drilling activities, support vessels and helicopters may elicit a startle reaction from marine mammals. This reaction may lead to disruption of marine mammals' normal activities. Stress may make them more vulnerable to parasites, disease, environmental contaminants, and/or predation (Majors and Myrick, 1990). There is little conclusive evidence for long-term displacements and population trends for marine mammals relative to noise.

**Discarded trash and debris:** Both entanglement in, and ingestion of debris have caused the death or serious injury of marine mammals (Laist, 1997; MMC, 1999). The limited amount of marine debris, if any, resulting from the proposed activities is not expected to substantially harm marine mammals. Operators are prohibited from deliberately discharging debris as mandated by MARPOL-Annex V and the Marine Plastic Pollution Research and Control Act, and regulations imposed by various agencies including the United States Coast Guard (USCG) and the Environmental Protection Agency (EPA).

Apache will operate in accordance with the regulations and also avoid accidental loss of solid waste items by maintaining waste management plans, manifesting trash sent to shore, and using special precautions such as covering outside trash bins to prevent accidental loss of solid waste. Special caution will be exercised when handling and disposing of small items and packaging materials, particularly those made of non-biodegradable, environmentally persistent materials such as plastic or glass.

Informational placards will be posted on all vessels and facilities having sleeping or food preparation capabilities. All offshore personnel, including contractors and other support services-related personnel (e.g. helicopter pilots, vessel captains and boat crews) will be indoctrinated on waste procedures, and will view the video (or Microsoft PowerPoint presentation), "All Washed Up: The Beach Litter Problem". Thereafter, all personnel will view the marine trash and debris training video annually.

Accidents: Collisions between support vessels and cetaceans would be unusual events, however should one occur, death or injury to marine mammals is possible. Contract vessel operators can avoid marine mammals and reduce potential deaths by maintaining a vigilant watch for marine mammals and maintaining a safe distance when they are sighted. Vessel crews should use a reference guide to help identify the twenty-eight species of whales and dolphins, and the single species of manatee that may be encountered in the Gulf of Mexico OCS. Vessel crews must report sightings of any injured or dead protected marine mammal species immediately, regardless of whether the injury or death is caused by their vessel, to the Marine Mammal and Sea Turtle Stranding Hotline at (800) 799-6637, or the Marine Mammal Stranding Network at (305) 862-2850. In addition, if the injury or death was caused by a collision with a contract vessel, the MMS must be notified within 24 hours of the strike by email to protectedspecies@mms.gov. If the vessel is the responsible party, it is required to remain available to assist the respective salvage and stranding network as needed.

Oil spills have the potential to cause sublethal oil-related injuries and spill-related deaths to marine mammals. However, it is unlikely that an accidental oil spill would occur from the proposed activities (refer to **Item 5**, Water Quality). Oil spill response activities may increase vessel traffic in the area, which could add to changes in cetacean behavior and/or distribution, thereby causing additional stress to the animals. The effect of oil dispersants on cetaceans is not known. The acute toxicity of oil dispersant chemicals included in Apache's OSRP is considered to be low when compared with the constituents and fractions of crude oils and diesel products. The activities proposed in this plan will be covered by Apache's OSRP (refer to information submitted in accordance with **Appendix F**).

There are no other IPFs (including physical disturbances to the seafloor and effluents) from the proposed activities which could impact marine mammals.

### 8. Sea Turtles

IPFs that could cause impacts to sea turtles as a result of the proposed operations include emissions, discarded trash and debris, and accidents. GulfCet II studies sighted most loggerhead, Kemp's ridley and leatherback sea turtles over shelf waters. Historically these species have been sighted up to the shelf's edge. They appear to be more abundant east of the Mississippi River than they are west of the river (Fritts et al., 1983b; Lohoefener et al., 1990). Deep waters may be used by all species as a transitory habitat.

**Emissions:** Noise from drilling activities, support vessels, and helicopters may elicit a startle reaction from sea turtles, but this is a temporary disturbance.

**Discarded trash and debris:** Both entanglement in, and ingestion of, debris have caused the death or serious injury of sea turtles (Balazs, 1985). The limited amount of marine debris, if any, resulting from the proposed activities is not expected to substantially harm sea turtles. Operators are prohibited from deliberately discharging debris as mandated by MARPOL-Annex V and the Marine Plastic Pollution Research and Control Act, and regulations imposed by various agencies including the United States Coast Guard (USCG) and the Environmental Protection Agency (EPA). Apache will operate in accordance with the regulations and also avoid accidental loss of solid waste items by maintaining waste management plans, manifesting trash sent to shore, and using special precautions such as covering outside trash bins to prevent accidental loss of solid waste. Special caution will be exercised when handling and disposing of small items and packaging materials, particularly those made of non-biodegradable, environmentally persistent materials such as plastic or glass.

Informational placards will be posted on all vessels and facilities having sleeping or food preparation capabilities. All offshore personnel, including contractors and other support services-related personnel (e.g. helicopter pilots, vessel captains and boat crews) will be indoctrinated on waste procedures, and will view the video (or Microsoft PowerPoint presentation), "All Washed Up: The Beach Litter Problem". Thereafter, all personnel will view the marine trash and debris training video annually.

Accidents: Collisions between support vessels and sea turtles would be unusual events, however should one occur, death or injury to sea turtles is possible. Contract vessel operators can avoid sea turtles and reduce potential deaths by maintaining a vigilant watch for sea turtles and maintaining a safe distance when they are sighted. Vessel crews should use a reference guide to help identify the five species of sea turtles that may be encountered in the Gulf of Mexico OCS. Vessel crews must report sightings of any injured or dead protected sea turtle species immediately, regardless of whether the injury or death is caused by their vessel, to the Marine Mammal and Sea Turtle Stranding Hotline at (800) 799-6637, or the Marine Mammal Stranding Network at (305) 862-2850. In addition, if the injury or death was caused by a collision with a contract vessel, the MMS must be notified within 24 hours of the strike by email to protectedspecies@mms.gov. If the vessel is the responsible party, it is required to remain available to assist the respective salvage and stranding network as needed.

All sea turtle species and their life stages are vulnerable to the harmful effects of oil through direct contact or by fouling of their food. Exposure to oil can be fatal, particularly to juveniles and hatchlings. However, it is unlikely that an accidental oil spill would occur from the proposed activities (refer to Item 5, Water Quality). Oil spill response activities may increase vessel traffic in the area, which could add to the possibility of collisions with sea turtles. The activities proposed in this plan will be covered by Apache's Regional Oil Spill Response Plan (refer to information submitted in accordance with Appendix F).

Page H-8 April 15, 2005 There are no other IPFs (including physical disturbances to the seafloor and effluents) from the proposed activities which could impact sea turtles.

### 9. Air Quality

The projected air emissions identified in Appendix G are not expected to affect the OCS air quality primarily due to distance to the shore or to any Prevention of Significant Deterioration Class I air quality area such as the Breton Wilderness Area. Eugene Island Block 93 is beyond the 200 kilometer (124 mile) buffer for the Breton Wilderness Area and is 29 miles from the coastline. Therefore, no special mitigation, monitoring, or reporting requirements apply with respect to air emissions.

Accidents and blowouts can release hydrocarbons or chemicals, which could cause the emission of air pollutants. However, these releases would not impact onshore air quality because of the prevailing atmospheric conditions, emission height, emission rates, and the distance of Eugene Island Block 93 from the coastline. There are no other IPFs (including effluents, physical disturbances to the seafloor, wastes sent to shore for treatment or disposal) from the proposed activities which could impact air quality.

### 10. Shipwreck Sites (known or potential)

IPFs that could cause impacts to known or unknown shipwreck sites as a result of the proposed operations in Eugene Island Block 93 are disturbances to the seafloor. Eugene Island Block 93 is adjacent to an area designated by MMS as high-probability for occurrence of shipwrecks. Apache will report to MMS the discovery of any evidence of a shipwreck and make every reasonable effort to preserve and protect that cultural resource. There are no other IPFs (including emissions, effluents, wastes sent to shore for treatment or disposal, or accidents) from the proposed activities that could cause impacts to shipwreck sites.

### 11. Prehistoric Archaeological Sites

IPFs that could cause impacts to prehistoric archaeological sites as a result of the proposed operations in Eugene Island Block 93 are disturbances to the seafloor and accidents (oil spills).

**Disturbances to the seafloor:** Eugene Island Block 93 is located inside the Archaeological Prehistoric high probability lines. Apache will report to MMS the discovery of any object of prehistoric archaeological significance and make every reasonable effort to preserve and protect that cultural resource.

Accidents: An accidental oil spill has the potential to cause some detrimental effects to prehistoric archaeological sites if the release were to occur subsea. However, it is unlikely that an accidental oil spill would occur from the proposed activities (refer to Item 5, Water Quality). The activities proposed in this plan will be covered by Apache's Regional Oil Spill Response Plan (refer to information submitted in accordance with Appendix F).

There are no other IPFs (including emissions, effluents, wastes sent to shore for treatment or disposal) from the proposed activities that could cause impacts to prehistoric archaeological sites.

### Vicinity of Offshore Location

#### 1. Essential Fish Habitat (EFH)

IPFs that could cause impacts to EFH as a result of the proposed operations in Eugene Island Block 93 include physical disturbances to the seafloor, and accidents. EFH includes all estuarine and marine waters and substrates in the Gulf of Mexico.

**Physical disturbances to the seafloor:** The Live Bottom Low Relief Stipulation, the Live Bottom (Pinnacle Trend) Stipulation, and the Eastern Gulf Pinnacle Trend Stipulation would prevent most of the potential impacts on live-bottom communities and EFH from bottom disturbing activities (e.g., anchoring, structure emplacement and removal).

Accidents: An accidental oil spill has the potential to cause some detrimental effects on EFH. Oil spills that contact coastal bays and estuaries, as well as OCS waters when pelagic eggs and larvae are present, have the greatest potential to affect fisheries. However, it is unlikely that an oil spill would occur from the proposed activities (refer to Item 5, Water Quality). The activities proposed in this plan will be covered by Apache's Regional OSRP (refer to information submitted in Appendix F).

There are no other IPFs (including emissions, effluents or wastes sent to shore for treatment or disposal) from the proposed activities which could impact essential fish habitat.

#### 2. Marine and Pelagic Birds

IPFs that could impact marine birds as a result of the proposed activities include air emissions, accidental oil spills, and discarded trash and debris from vessels and the facilities.

**Emissions:** Emissions of pollutants into the atmosphere from the proposed activities are far below concentrations which could harm coastal and marine birds.

Accidents: An oil spill would cause localized, low-level petroleum hydrocarbon contamination. However, it is unlikely that an oil spill would occur from the proposed activities (refer to Item 5, Water Quality). Marine and pelagic birds feeding at the spill location may experience chronic, nonfatal, physiological stress. It is expected that few, if any, coastal and marine birds would actually be affected to that extent. The activities proposed in this plan will be covered by Apache's Regional OSRP (refer to information submitted in Appendix F).

Page H-10 April 15, 2005 Discarded trash and debris: Marine and pelagic birds could become entangled and snared in discarded trash and debris, or ingest small plastic debris, which can cause permanent injuries and death. Operators are prohibited from deliberately discharging debris as mandated by MARPOL-Annex V and the Marine Plastic Pollution Research and Control Act, and regulations imposed by various agencies including the United States Coast Guard (USCG) and the Environmental Protection Agency (EPA). Apache will operate in accordance with the regulations and also avoid accidental loss of solid waste items by maintaining waste management plans, manifesting trash sent to shore, and using special precautions such as covering outside trash bins to prevent accidental loss of solid waste. Special caution will be exercised when handling and disposing of small items and packaging materials, particularly those made of non-biodegradable, environmentally persistent materials such as plastic or glass. Informational placards will be posted on all vessels and facilities having sleeping or food preparation capabilities. All offshore personnel, including contractors and other support services-related personnel (e.g. helicopter pilots, vessel captains and boat crews) will be indoctrinated on waste procedures, and will view the video (or Microsoft PowerPoint presentation), "All Washed Up: The Beach Litter Problem". Thereafter, all personnel will view the marine trash and debris training video annually. Debris, if any, from these proposed activities will seldom interact with marine and pelagic birds; therefore, the effects will be negligible.

There are no other IPFs (including effluents, physical disturbances to the seafloor, or wastes sent to shore for treatment or disposal) from the proposed activities which could impact marine and pelagic birds.

### 3. Public Health and Safety Due to Accidents.

There are no IPFs (emissions, effluents, physical disturbances to the seafloor, wastes sent to shore for treatment or disposal or accidents, including an accidental  $H_2S$  release) from the proposed activities which could cause impacts to public health and safety. In accordance with NTL No. 2003-G17, sufficient information is included in Appendix C to justify our request that our proposed activities be classified by MMS as  $H_2S$  absent.

### **Coastal and Onshore**

### 1. Beaches

IPFs from the proposed activities that could cause impacts to beaches include accidents (oil spills) and discarded trash and debris.

Accidents: Oil spills contacting beaches would have impacts on the use of recreational beaches and associated resources. Due to the response capabilities that would be implemented, no significant adverse impacts are expected. The activities proposed in this plan will be covered by Apache's Regional OSRP (refer to information submitted in Appendix F).

Page H-11 April 15, 2005 **Discarded trash and debris:** Trash on the beach is recognized as a major threat to the enjoyment and use of beaches. There will only be a limited amount of marine debris, if any, resulting from the proposed activities. Operators are prohibited from deliberately discharging debris as mandated by MARPOL-Annex V and the Marine Plastic Pollution Research and Control Act, and regulations imposed by various agencies including the United States Coast Guard (USCG) and the Environmental Protection Agency (EPA). Apache will operate in accordance with the regulations and also avoid accidental loss of solid waste items by maintaining waste management plans, manifesting trash sent to shore, and using special precautions such as covering outside trash bins to prevent accidental loss of solid waste. Special caution will be exercised when handling and disposing of small items and packaging materials, particularly those made of non-biodegradable, environmentally persistent materials such as plastic or glass.

Informational placards will be posted on all vessels and facilities having sleeping or food preparation capabilities. All offshore personnel, including contractors and other support services-related personnel (e.g. helicopter pilots, vessel captains and boat crews) will be indoctrinated on waste procedures, and will view the video (or Microsoft PowerPoint presentation), "All Washed Up: The Beach Litter Problem". Thereafter, all personnel will view the marine trash and debris training video annually.

There are no other IPFs (emissions, effluents, physical disturbances to the seafloor, or wastes sent to shore for treatment or disposal) from the proposed activities which could impact beaches.

#### 2. Wetlands

Salt marshes and seagrass beds fringe the coastal areas of the Gulf of Mexico. Due to the distance from shore (29 miles), accidents (oil spills) represent an IPF which could impact these resources.

Accidents: Level of impact from an oil spill will depend on oil concentrations contacting vegetation, kind of oil spilled, types of vegetation affected, season of the year, pre-existing stress level of the vegetation, soil types, and numerous other factors. Light-oiling impacts will cause plant die-back with recovery within two growing seasons without artificial replanting. However, it is unlikely that an oil spill would occur from the proposed activities (refer to Item 5, Water quality). If a spill were to occur, response capabilities as outlined in Apache's Regional OSRP (refer to information submitted in Appendix F) would be implemented.

There are no other IPFs (emissions, effluents, physical disturbances to the seafloor, or wastes sent to shore for treatment or disposal) from the proposed activities that could cause impacts to wetlands.

#### 3. Shore Birds and Coastal Nesting Birds

Atchafalaya Delta WMA and Marsh Island WMA (24 and 29 miles, respectively, from Eugene Island Block 93) are highly productive habitats for wildlife. Thousands of shore birds use the refuges as a wintering area. Also, wading birds nest on the refuges. The Atchafalaya Delta WMA and Marsh Island WMA provide habitats for colonies of nesting wading birds and seabirds as well as wintering shorebirds and waterfowl. The most abundant nesters are brown pelicans, laughing gulls, and royal, Caspian, and sandwich terns. IPFs from the proposed activities that could cause impacts to shore birds and coastal nesting birds are accidents (oil spills) and discarded trash and debris.

Accidents: Oil spills could cause impacts to shore birds and coastal nesting birds. The birds most vulnerable to direct effects of oiling include those species that spend most of their time swimming on and under the sea surface, and often aggregate in dense flocks (Piatt et al., 1990; Vauk et al., 1989). Coastal birds, including shorebirds, waders, marsh birds, and certain water fowl, may be the hardest hit indirectly through destruction of their feeding habitat and/or food source (Hansen, 1981; Vermeer and Vermeer, 1975). Direct oiling of coastal birds and certain seabirds is usually minor; many of these birds are merely stained as a result of their foraging behaviors. Birds can ingest oil when feeding on contaminated food items or drinking contaminated water.

Oil-spill cleanup operations will result in additional disturbance of coastal birds after a spill. However, it is unlikely that an oil spill would occur from the proposed activities (refer to Item 5, Water quality). Due to the distance from shore being 29 miles, Apache would immediately implement the response capabilities outlined in their Regional OSRP (refer to information submitted in Appendix F).

**Discarded trash and debris:** Coastal and marine birds are highly susceptible to entanglement in floating, submerged, and beached marine debris: specifically plastics. Operators are prohibited from deliberately discharging debris as mandated by MARPOL-Annex V and the Marine Plastic Pollution Research and Control Act, and regulations imposed by various agencies including the United States Coast Guard (USCG) and the Environmental Protection Agency (EPA). Apache will operate in accordance with the regulations and also avoid accidental loss of solid waste items by maintaining waste management plans, manifesting trash sent to shore, and using special precautions such as covering outside trash bins to prevent accidental loss of solid waste. Special caution will be exercised when handling and disposing of small items and packaging materials, particularly those made of non-biodegradable, environmentally persistent materials such as plastic or glass.

Informational placards will be posted on vessels and every facility that has sleeping or food preparation capabilities. All offshore personnel, including contractors and other support services-related personnel (e.g. helicopter pilots, vessel captains and boat crews) will be indoctrinated on waste procedures, and will view the video (or Microsoft PowerPoint presentation), "All Washed Up: The Beach Litter Problem". Thereafter, all personnel will view the marine trash and debris training video annually.

Page H-13 April 15, 2005 There are no other IPFs (emissions, effluents, physical disturbances to the seafloor, or wastes sent to shore for treatment or disposal) from the proposed activities that could cause impacts to shore birds and coastal nesting birds.

#### 4. Coastal Wildlife Refuges

Eugene Island Block 93 is approximately 24 and 29 miles, respectively, from the Atchafalaya Delta WMA and Marsh Island WMA. Management goals of the Atchafalaya Delta WMA and Marsh Island WMA are waterfowl habitat management, marsh restoration, providing sanctuary for nesting and wintering seabirds, and providing sandy beach habitat for a variety of wildlife species. IPFs from the proposed activities that could cause impacts to this coastal wildlife refuge are accidents (oil spills) and discarded trash and debris.

Impacts to shore birds and coastal nesting birds and to the beach, was covered in previous sections. Other wildlife species found on the refuges include nutria, rabbits, raccoons, alligators, and loggerhead turtles. Impacts to loggerhead turtles were also covered under a previous section.

Accidents: It is unlikely that an oil spill would occur from the proposed activities (refer to Item 5, Water quality). Response capabilities would be implemented, no impacts are expected. The activities proposed in this plan will be covered by Apache's Regional OSRP (refer to information submitted in Appendix F).

There are no other IPFs (emissions, effluents, physical disturbances to the seafloor, or wastes sent to shore for treatment or disposal) from the proposed activities that could cause impacts to coastal wildlife refuges.

#### 5. Wilderness Areas

An accidental oil spill from the proposed activities could cause impacts to wilderness areas. However, it is unlikely that an oil spill would occur from the proposed activities (refer to Item 5, Water Quality). Due to the distance from the nearest designated Wilderness Area (160 miles) and the response capabilities that would be implemented, no significant adverse impacts are expected. The activities proposed in this plan will be covered by Apache's Regional OSRP (refer to information submitted in Appendix F).

#### 6. Other Environmental Resources Identified

None

### (C) Impacts on your proposed activities.

The site-specific environmental conditions have been taken into account for the proposed activities. No impacts are expected on the proposed activities from site-specific environmental conditions.

#### (D) Alternatives

No alternatives to the proposed activities were considered to reduce environmental impacts.

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#### (E) Mitigation Measures

No mitigation measures other than those required by regulation will be employed to avoid, diminish, or eliminate potential impacts on environmental resources.

#### (F) Consultation

No agencies or persons were consulted regarding potential impacts associated with the proposed activities. Therefore, a list of such entities has not been provided.

#### (G) References

Authors:

- American Petroleum Institute (API). 1989. Effects of offshore petroleum operations on cold water marine mammals: a literature review. Washington, DC: American Petroleum Institute. 385 pp.
- Balazs, G.H. 1985. Impact of ocean debris on marine turtles: entanglement and ingestion. In: Shomura, R.S. and H.O. Yoshida, eds. Proceedings, Workshop on the Fate and Impact of Marine Debris, 26-29 November 1984, Honolulu, HI. U.S. Dept. of Commerce. NOAA Tech. Memo. NOAA-TM-NMFS-SWFC-54. Pp 387-429.
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Although not cited, the following were utilized in preparing this EIA:

- Hazard Surveys
- MMS EIS's:
  - o GOM Deepwater Operations and Activities. Environmental Assessment. MMS 2000-001
  - GOM Central and Western Planning Areas Sales 166 and 168 Final Environmental Impact Statement. MMS 96-0058

# APPENDIX I COASTAL MANAGEMENT CONSISTENCY INFORMATION

A certificate of Coastal Zone Management Consistency for the State of Louisiana is not required for the supplemental operations.

Apache Corporation Supplemental DOCD Eugene Island Block 93 (OCS 00228)

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> Page I-1 April 15, 2005

, U'.S. Department of the Interior Minerals Management Service

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OMB Control Number: 1010-0045 OMB Approval Expires: August 31, 200(

OCS PLA	N INFORMAT	TION FORM

1	GENERAL INF	ORMATION .						
Type of OCS Plan:	· · · · · · · · · · · · · · · · · · ·	oment Operations Coordination Document (DOCD)						
Company Name: Apache Co	MMS Operator Number: 00105							
Address: 2000 Post Oak Bl	Contact Person: Cher	eryl Powell						
Suite 100	Phone Number: (281) 578-3388							
Houston, TX 7705	Email Address: Cher	yl.powell@j	ccteam.com					
Lease(s): 00228 A	rea: Eugene Island Block(s):	93 Project Na	me (If Appli	icable): Not	Appli	cabl	e	
Objective(s): Oil Gas Sulphur Salt Onshore Base: Fourchon, LA Distance					(Miles	s): 3	0	
	Description of Proposed Activ	vities (Mark all that a	pply)					
Exploration drilling		Development	drilling	•				
Well completion		Installation of	f production	platform				
Well test flaring (for mo	re than 48 hours)	Installation of	fproduction	facilities				
Installation of caisson or	platform as well protection structure	e 🔲 Installation of	f satellite stru	ucture				
Installation of subsea we	ellheads and/or manifolds	Commence pr	roduction					
Installation of lease term		Other (Specif		be)				
Have you submitted or do you p	lan to submit a Conservation Informatio	on Document to accompa	ny this plan?		Yes	X	No	
	nusual technology to conduct your activ				Yes	X	No	
Do you propose any facility that			Yes	X	No			
Do you propose any activities the		Yes	X	No				
Have all of the surface locations	ved by MMS?	2 X	Yes		No			
	Tentative Schedule of	Proposed Activities			-			
	Proposed Activity		Start Date	End Date	No.	of L	Days	
Installation of lease term pipe	line		06/01/05 06/15/05		15			
Installation of deck			06/01/05 06/05/05		5			
Commence production from Well No. 014				06/16/21	16 years			
	·····							
Descriptio	on of Drilling Rig	Descript	ion of Prod	uction Platfe	orm			
	on of Drilling Rig	Descript				 1		
Jackup	Drillship	-	Т	uction Platfo ension leg pl ompliant tov	latforn	n		
		Caisson	П Т С	ension leg pl	latforn	n		
Jackup Gorilla Jackup	Drillship Diltform rig	Caisson Well protector Fixed platform		ension leg pl ompliant tov	latforn ver		em	
Jackup       Gorilla Jackup       Semisubmersible	Drillship Diltform rig Submersible Other (Attach Description)	Caisson Well protector Fixed platform	Image: The second sec	ension leg pl ompliant tov duyed tower	latforn ver uction	syst		
Jackup         Gorilla Jackup         Semisubmersible         DP Semisubmersible	Drillship Diltform rig Submersible Other (Attach Description)	Caisson Caisson Subsea manifo	Image: The second sec	ension leg pl ompliant tov uyed tower loating produ	latforn ver uction	syst		
Jackup         Gorilla Jackup         Semisubmersible         DP Semisubmersible	Drillship Dillship Dillship Dillship Dillship Dillship Dillship Dillship Dillship Dillship Description Description of Lease	Caisson Caisson Subsea manifo Spar ETerm Pipelines		ension leg pl ompliant tov uyed tower loating produ	latform ver uction descr	syst		
Jackup         Gorilla Jackup         Semisubmersible         DP Semisubmersible         Drilling Rig Name (If K	Drillship Dillship Description of Lease	Caisson Caisson Subsea manifo Spar ETerm Pipelines	Image: marked black     Image: marked black     Image: marked black     Image: marked black       Image: marked black     Image: marked black     Image: marked black     Image: marked black       Image: marked black     Image: marked black     Image: marked black     Image: marked black       Image: marked black     Image: marked black     Image: marked black     Image: marked black       Image: marked black     Image: marked black     Image: marked black     Image: marked black       Image: marked black     Image: marked black     Image: marked black     Image: marked black       Image: marked black     Image: marked black     Image: marked black     Image: marked black       Image: marked black     Image: marked black     Image: marked black     Image: marked black       Image: marked black     Image: marked black     Image: marked black     Image: marked black       Image: marked black     Image: marked black     Image: marked black     Image: marked black       Image: marked black     Image: marked black     Image: marked black     Image: marked black       Image: marked black     Image: marked black     Image: marked black     Image: marked black       Image: marked black     Image: marked black     Image: marked black     Image: marked black       Image: marked black     Image: marked black     Image: marked black     Image: marked black	ension leg pl ompliant tow buyed tower loating produ other (Attach	latform ver uction descr	syst		
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MMS Form MMS-137 (August 2003 – Supersedes all previous editions of form MMS-137, which may not be used.)

APPENDIX J

y .4 - <b>4</b>									
			Proposed Well	I/Structure	Location				
Well or Structure	Name	/Number (If r	enaming well or structure, r	eference prev	ious name): 014		Subsea Completion		
Anchor Radius (if applicable) in feet: N/A							🗌 Yes 🛛 No		
		Surface Location Bo			Bottom-Hole Lo	ocation (For We	lls)		
Lease No.	•	OCS 00228			· · · · · ·		•		
Area Name	]	Eugene Island							
Block No.		93							
Blockline		N/S Departure: 2079.23' FNL							
Departures (in feet)	E/W Departure: 2510.73' FEL								
Lambert X-Y coordinates		X: 1,862,289	0.83'						
		Y: 151.824.71'							
Latitude/		Latitude: 29°	05' 00.417"						
Longitude		Longitude: -91° 45' 51.926"							
		TVD (Feet): MD (Feet):		Water Depth (Feet):					
Anchor Location	ns for	Drilling Rig	or Construction Barge (If	anchor radiu	s supplied above.	not necessary)			
Anchor Name or No.	Are	<u> </u>	X Coordinate		Y Coordinate		Length of Anchor Chain on Seafloor		
_01110.			X =	Y =	=				
			X =	Y =					
			X =	Y =					
			X =	Y =		· · · · · · · · · · · · · · · · · · ·			
			X =	Y =	· · · · · · · · · · · · · · · · · · ·	<u> </u>			
			X =	Y =					
			X =	Y =					
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Paperwork Red	uction	Act of 1995	Statement: The Paperwork	Reduction Ac	t of 1995 (44 U.S.	C. Chapter 35) r	equires us to inform		
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