

UNITED STATES GOVERNMENT  
MEMORANDUM

September 26, 2003

To: Public Information (MS 5034)  
From: Plan Coordinator, FO, Plans Section (MS  
5231)

Subject: Public Information copy of plan  
Control # - N-07905  
Type - Initial Exploration Plan  
Lease(s) - OCS-G25020 Block - 126 Main Pass Area  
Operator - Pogo Producing Company  
Description - Wells A, B, C, D, E, and F  
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.

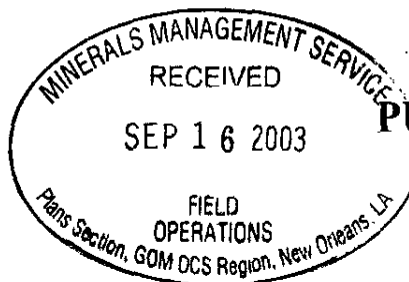


Michelle Griffitt  
Plan Coordinator

Site Type/Name	Botm Lse/Area/Blk	Surface Location	Surf Lse/Area/Blk
WELL/A	G25020/MP/126	5600 FSL, 1650 FWL	G25020/MP/126
WELL/B	G25020/MP/126	5600 FSL, 1650 FWL	G25020/MP/126
WELL/C	G25020/MP/126	5600 FSL, 1650 FWL	G25020/MP/126
WELL/D	G25020/MP/126	5100 FSL, 5400 FWL	G25020/MP/126
WELL/E	G25020/MP/126	5100 FSL, 5400 FWL	G25020/MP/126
WELL/F	G25020/MP/126	12000 FSL, 4900 FWL	G25020/MP/126

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**PUBLIC COPY**

September 15, 2003

## INITIAL EXPLORATION PLAN

Lease Number (s): OCS-G 25020  
Area/Block: Main Pass 126  
Prospect Name: N/A  
Offshore: Louisiana and Mississippi

Submitted by: Pogo Producing Company  
5 Greenway Plaza, Suite 2700  
Houston, Texas 77046

Steve Partain  
(713) 297-5043  
[partains@pogoproducing.com](mailto:partains@pogoproducing.com)

Estimated start up date: November 1, 2003

CONTROL No. N-7905  
REVIEWER: Michelle Griffitt  
PHONE: (504) 736-2975

Authorized Representative:  
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J. Connor Consulting, Inc.  
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No. Copies Being Submitted:

Proprietary: 5  
Public Info: 6

For MMS:  
Plan No. \_\_\_\_\_  
Assigned to: \_\_\_\_\_

**POGO PRODUCING COMPANY**

**INITIAL EXPLORATION PLAN**

**LEASE OCS-G 25020**

**MAIN PASS 126**

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

## **APPENDIX A CONTENTS OF PLAN**

Pogo Producing Company (Pogo) is the designated operator of the subject oil and gas lease.

### ***(A) DESCRIPTION, OBJECTIVES AND SCHEDULE***

This Initial Exploration Plan provides for the drilling, completion and ~~testing~~ of six (6) exploratory wells in Main Pass Block 126.

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

### ***(B) LOCATION***

Included as *Attachments A-1 and A-2* are the well location map showing the surface locations of the proposed wells and a bathymetry map showing the water depths in this area.

Additional well information is included in Appendix J, on the Well Information Form.

### ***(C) DRILLING UNIT***

A description of the drilling unit is included in Appendix J, on the Plan Information Form. Rig specifications will be made a part of each Application for Permit to Drill.

Safety features on the drilling unit will include well control, pollution prevention, and blowout prevention equipment as described in Title 30 CFR Part 250, Subparts C, D, E, and G; and as further clarified by MMS Notices to Lessees, and current policy making invoked by the MMS, Environmental Protection Agency and the U.S. Coast Guard. Appropriate life rafts, life jackets, ring buoys, etc., will be maintained on the facility at all times.

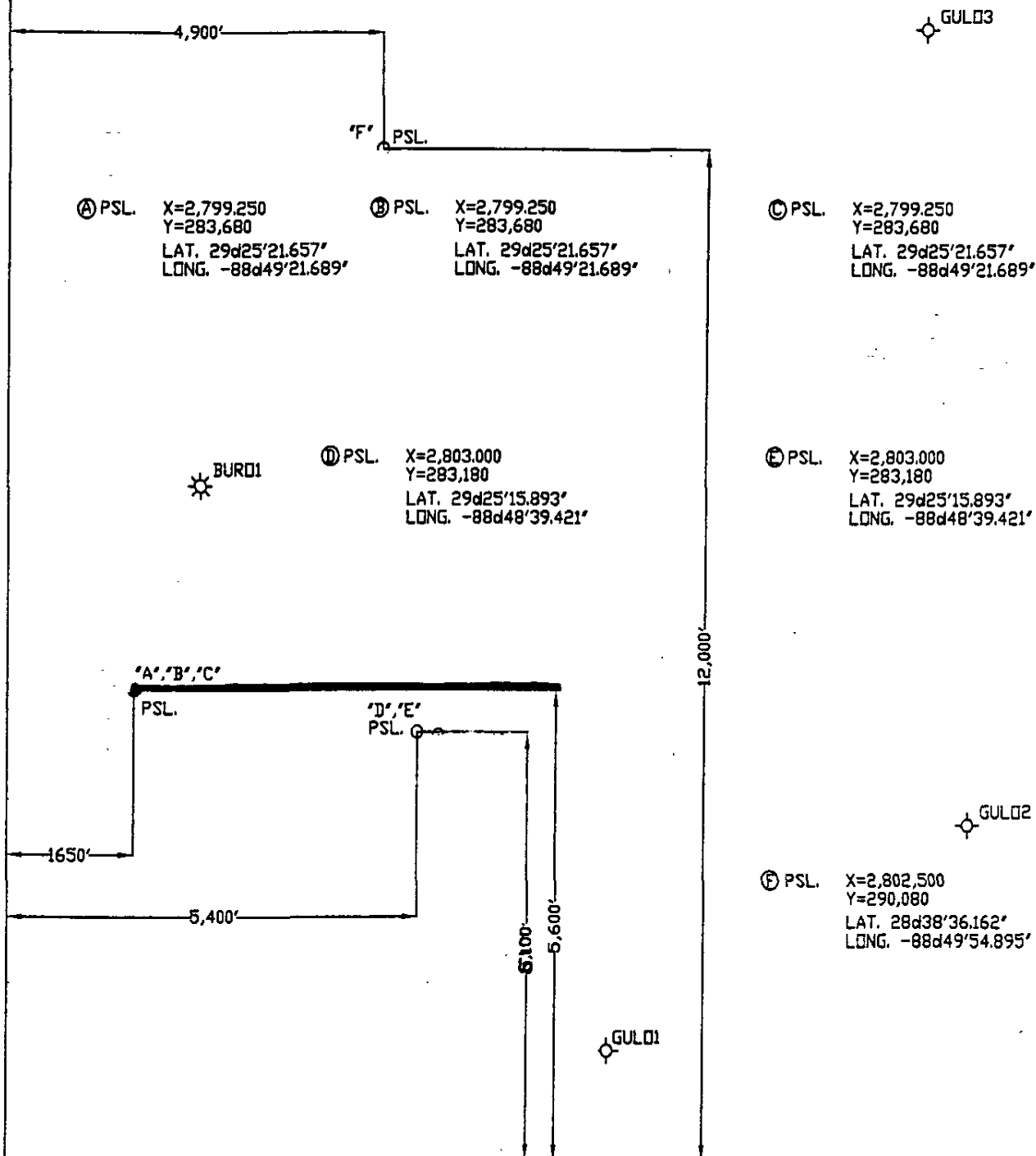
Operator will ensure employees and contractor personnel engaged in well control operations understand and can properly perform their duties.

Pollution prevention measures include installation of curbs, gutters, drip pans, and drains on drilling deck areas to collect all contaminants and debris.

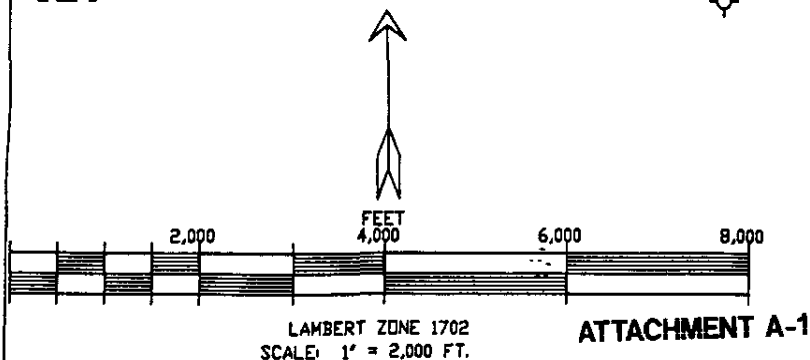
Pogo does not propose additional safety, pollution prevention, or early spill detection measures beyond those required by 30 CFR 250.

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126



129



POGO PRODUCING COMPANY

MAIN PASS AREA  
BLOCK 126

LOCATION MAP

## **APPENDIX B GENERAL INFORMATION**

### ***(A) CONTACT***

Inquiries may be made to the following authorized representative:

Valerie Land  
J. Connor Consulting, Inc.  
16225 Park Ten Place, Suite 700  
Houston, Texas 77084  
(281) 578-3388  
E-mail address: [valerie.land@jccteam.com](mailto:valerie.land@jccteam.com)

### ***(B) PROSPECT NAME***

Not applicable

### ***(C) NEW OR UNUSUAL TECHNOLOGY***

Pogo does not propose to use any new or unusual technology to carry out the proposed exploration activities. New or unusual technology is defined as equipment and/or procedures that:

1. Function in a manner that potentially causes different impacts to the environment than the equipment or procedures did in the past;
2. Have not been used previously or extensively in an MMS OCS Region;
3. Have not been used previously under the anticipated operating conditions; or
4. Have operating characteristics that are outside the performance parameters established by 30 CFR 250.

### ***(D) BONDING INFORMATION***

The bond requirements for the activities and facilities proposed in this EP 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.

### ***(E) ONSHORE BASE AND SUPPORT VESSELS***

A Vicinity Map is included as *Attachment B-1*, showing Main Pass 126 located approximately 19 miles from the nearest shoreline and approximately 34 miles from the onshore support base in Venice, 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:

Type	Weekly Estimate (No.) of Roundtrips
Crew Boat	5
Supply Boat	2
Helicopter	4

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

***(F) LEASE STIPULATION***

Exploration activities are subject to the following stipulation attached to Lease OCS-G 25020 Main Pass 126.

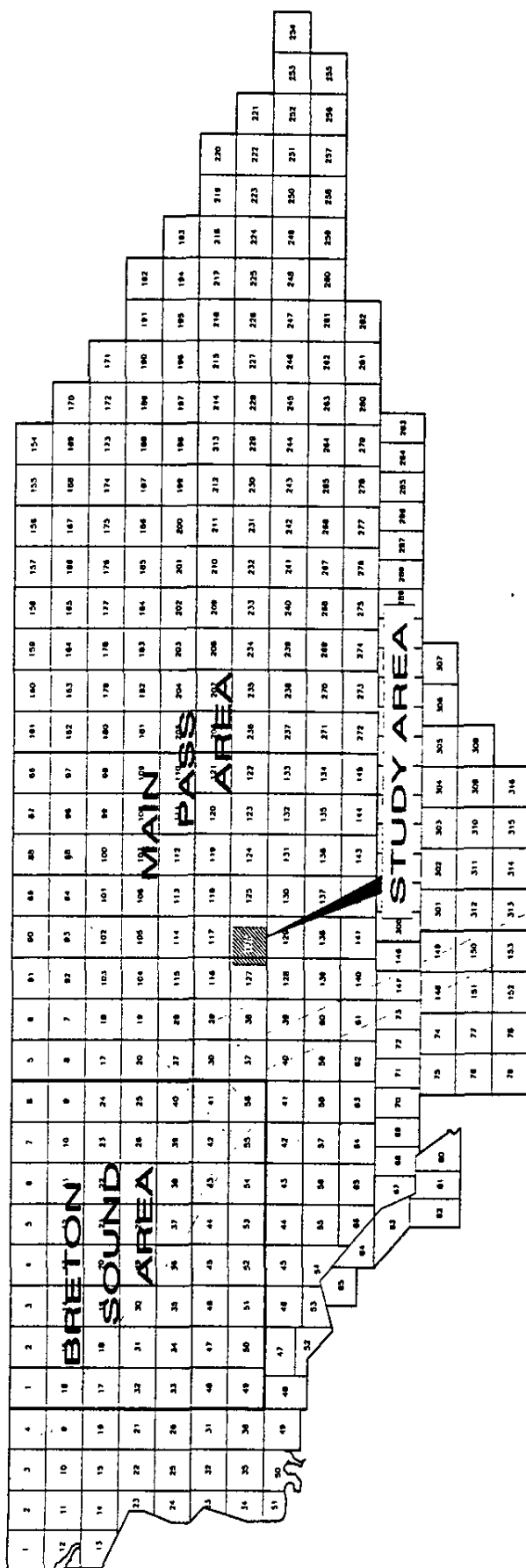
**1. Marine Protected Species**

Lease Stipulation No. 6 is meant to reduce the potential taking of marine protected species. Pogo will operate in accordance with NTL 2003-G07, to minimize the risk of vessel strikes to protected species and report observations of injured or dead protected species, and NTL 2003-G06 to prevent intentional and/or accidental introduction of debris into the marine environment.

**ARCHAEOLOGY SURVEY BLOCKS**

Main Pass Block 126 has been determined by the MMS as potentially containing a high probability of historic and prehistoric archaeological properties. Therefore, an Archaeological Survey Report has been prepared in accordance with NTL 2002-G01, and is being submitted under this Initial Exploration Plan.

# MAIN PASS & BRETON SOUND AREAS



## VICINITY MAP



## **APPENDIX C**

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

#### **(A) STRUCTURE CONTOUR MAP**

A current structure contour map drawn to the top of the prospective hydrocarbon sand, showing the entire area of interest, the location of each proposed well, and the locations of geological cross-sections is included as *Attachment C-1*.

#### **(B) TRAPPING FEATURES**

#### **(C) DEPTH OF GEOPRESSURE**

#### **(D) INTERPRETED DEEP SEISMIC LINE(S)**

Included as *Attachments C-2 through C-4*, are interpreted deep seismic lines. These lines are migrated, annotated with depth scale, and are within 500' of the surface locations of the proposed wells.

#### **(E) GEOLOGICAL STRUCTURE CROSS-SECTIONS**

Interpreted geological structure cross-sections showing the location and depth of each proposed well and at least one key horizon or objective sand are included as *Attachments C-5 through C-7*.

#### **(F) SHALLOW HAZARDS REPORT**

A shallow hazards survey was conducted over Main Pass Block 126. Two copies of the shallow hazard report are being submitted to the MMS under separate cover.

#### **(G) SHALLOW HAZARDS ASSESSMENT**

A shallow hazards assessment has been prepared for each proposed surface location, evaluating seafloor and subsurface geological and manmade features and conditions that may adversely affect drilling operations, and is included as *Attachment C-8*.

#### **(H) HIGH-RESOLUTION SEISMIC LINES**

Attached to one Proprietary Copy of this Plan, are annotated high-resolution seismic lines. These lines are the closest high-resolution seismic lines to the proposed surface locations.

#### **(I) STRATIGRAPHIC COLUMN**

A generalized biostratigraphic/lithostratigraphic column depicting each well from the seafloor to total depth, with each horizon labeled, is included as *Attachment C-9*.

***(J) TIME VS DEPTH TABLES***

Appropriate tables providing seismic time versus depth for the proposed well locations in areas where there is no well control is included as *Attachment C-10*.

***(K) HYDROGEN SULFIDE INFORMATION***

In accordance with Title 30 CFR 250.417(c), Pogo requests that Main Pass 126 be classified by the MMS as H<sub>2</sub>S absent.

**MAIN PASS 126**  
**HAZARD STATEMENT**

The hazard survey completed for Pogo by Fugro Geoservices, indicates large areas of acoustic shadowing as well as numerous shallow channels which could possibly present a problem to rigs or production structures which may be located in or near the area. The Pogo surface location has been selected in areas where these channels have not been defined.



## **APPENDIX D**

### **BIOLOGICAL AND PHYSICAL INFORMATION**

#### ***CHEMOSYNTHETIC INFORMATION***

This EP 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***

Main Pass Block 126 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.

#### ***ARCHAEOLOGICAL INFORMATION***

Included are three (3) copies of an archaeological report conducted in accordance with NTL No. 2002-G01.

## **APPENDIX E**

### **WASTES AND DISCHARGES INFORMATION**

#### ***DISCHARGES***

All discharges associated with operations proposed in this Initial Exploration Plan 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).

For discharges, the type and general characteristics of the waste, the amount to be discharged (volume or rate), the maximum discharge rate, a description of any treatment or storage and the discharge location and method for each type of discharge are provided in tabular format in *Attachment E-1*. For purposes of this Appendix, the term discharges describe those wastes generated by the proposed activities that will be disposed of by releasing them into the waters of the Gulf of Mexico at the site where they are generated, usually after receiving some form of treatment before they are released, and in compliance with applicable NPDES permits.

#### ***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-2*. 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.

**Discharge Table (Wastes to be discharged overboard)**

<b>Type of Waste Approximate Composition</b>	<b>Amount to be Discharged (volume or rate)</b>	<b>Maximum Discharge Rate</b>	<b>Treatment and/or Storage, Discharge Location* and Discharge Method</b>
Water-based drilling fluids	5,500 bbl/well	200 bbl/hr	Main Pass Block 128 Discharge overboard
Drill cuttings associated with water-based fluids	3,500 bbl/well	400 bbl/hr	Main Pass Block 128 Discharge overboard
Drill cuttings associated with synthetic drilling fluids	NA	NA	NA
Muds, cuttings and cement at the seafloor	NA	NA	NA
Produced Water	NA	NA	NA
Sanitary wastes	20 gal/person/day	NA	Main Pass Block 128 Chlorinate and discharge
Domestic waste	20 gal/person/day	Not applicable	Main Pass Block 128 Remove floating solids and discharge
Deck Drainage	0-2,000 bbl/day Dependant upon rainfall	15 bbl per hour (maximum separator discharge)	Main Pass Block 128 Remove oil and grease and discharge
Well treatment workover or completion fluids	NA	NA	NA
Uncontaminated fresh or seawater	50 bbl (drilling)	NA	Main Pass Block 128 Discharge overboard
Desalinization Unit Water	10 bbl/day	NA	Main Pass Block 128 Discharge overboard
Uncontaminated bilge water	40 bbl	10 m <sup>3</sup> /hr	Main Pass Block 128 Discharge overboard
Uncontaminated ballast water	22,000 bbl	1,000 m <sup>3</sup> /hr	Main Pass Block 128 Discharge overboard
Misc. discharges to which treatment chemicals have been added.	NA	NA	Main Pass Block 128 Discharge overboard
Miscellaneous discharges (permitted under NPDES) (excess cement with cementing chemicals)	100 bbl	NA	Main Pass Block 128 Discharge at seafloor without treatment

\* Area, block, MMS facility ID (if available)

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

Type of Waste Approximate Composition	Amount*	Rate per Day	Name/Location of Disposal Facility	Treatment and/or Storage, Transport and Disposal Method
Spent oil-based drilling fluids and cuttings	N/A	N/A		
Spent synthetic-based drilling fluids and cuttings	N/A	N/A		
Oil-contaminated produced sand	N/A	N/A		
Waste Oil	40 bbl/yr	bbl/day	ASCO Venice, Louisiana	Recycle
Produced water	N/A	N/A		
Produced water	N/A	N/A		
Norm-contaminated wastes	N/A	N/A		
Trash and debris	2560 ft <sup>3</sup>	ft <sup>3</sup> /day	Riverside Recycling, ASCO Venice, Louisiana	Landfill
Chemical product wastes	N/A	N/A		
Chemical product wastes	N/A	N/A		
Workover fluids	1000 Bbl	bbl/day	Newpark Environmental	Disposal Well

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

## APPENDIX F OIL SPILL INFORMATION

### **1. Regional OSRP Information**

Pogo Producing Company is the only entity covered in their Regional Oil Spill Response Plan (OSRP) initially approved on December 6, 2001 and most recently updated and approved on June 11, 2003. Activities proposed in this EP will be covered by the Regional OSRP.

### **2. OSRO Information**

Pogo'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.

### **3. Worst-Case Scenario Comparison**

Category	Regional OSRP WCD	EP WCD
Type of Activity	Exploratory Drilling	Exploratory Drilling
Facility Location (Area/Block)	MP 61/62	MP126
Facility Designation	MODU	MODU
Distance to Nearest Shoreline (miles)	10	19
Volume Storage tanks (total) Uncontrolled blowout Total Volume	15,000	5,000
Type of Oil(s) (crude, condensate, diesel)	Crude	Crude
API Gravity	29°	40°

Pogo has determined that the worst-case scenario from the activities proposed in this EP does not supercede the worst-case scenario from our approved regional OSRP for the exploration activities.

Since Pogo has the capability to respond to the worst-case spill scenario included in our regional OSRP approved on June 11, 2003, and since the worst-case scenario determined for our EP does not replace the worst-case scenario in our regional OSRP, I hereby certify that Pogo has the capability to respond, to the maximum extent practicable, to a worst-case discharge, or a substantial threat of such a discharge, resulting from the activities proposed in our EP.



#### **4. FACILITY TANKS, PRODUCTION VESSELS**

All facility tanks of 25 barrels or more.

Type of Storage Tank	Type of Facility	Tank Capacity (bbls)	Number of Tanks	Total Capacity (bbls)	Fluid Gravity (API)
Fuel Oil (Marine Diesel)	Jackup	1 x 1500 1 x 200	2	1700	27°
Oil Base Mud	N/A	N/A	N/A	N/A	N/A

## APPENDIX G

### AIR EMISSIONS INFORMATION

#### **AIR EMISSIONS INFORMATION**

<b>Screen Procedures for EP's</b>	<b>Yes</b>	<b>No</b>
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 = distance to shore in miles)?		X
Do your emission calculations include any emission reduction measures or modified emission factors?		X
Are your proposed exploration activities located east of 87.5° W longitude?		X
Do you expect to encounter H <sub>2</sub> S at concentrations greater than 20 parts per million (ppm)?		X
Do you propose to flare or vent natural gas for more than 48 continuous hours from any proposed well?		X
Do you propose to burn produced hydrocarbon liquids?		X

#### **Summary Information**

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.

<b>Air Pollutant</b>	<b>Plan Emission Amounts<sup>1</sup> (tons)</b>	<b>Calculated Exemption Amounts<sup>2</sup> (tons)</b>	<b>Calculated Complex Total Emission Amounts<sup>3</sup> (tons)</b>
Particular matter (PM)	12.61	632.70	12.61
Sulphur dioxide (SO <sub>2</sub> )	7.34	632.70	7.34
Nitrogen oxides (NO <sub>x</sub> )	433.57	632.70	433.57
Volatile organic compounds (VOC)	13.01	632.70	13.01
Carbon Monoxide (CO)	94.60	24209.25	94.60

<sup>1</sup>For activities proposed in your EP, 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: Brenda Montalvo  
(281) 578-3388  
[brenda.montalvo@jccteam.com](mailto:brenda.montalvo@jccteam.com)

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)**

# Pogo Producing Company (Pogo)

## Initial Exploration Plan (EP) Main Pass Block 126 (MP126) OCS-G 25020

### (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
<b>Site-specific at Offshore Location</b>						
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		X	
Fisheries		X	X		X	
Marine Mammals	X(8)	X			X(8)	X
Sea Turtles	X(8)	X			X(8)	X
Air quality	X(9)					
Shipwreck sites (known or potential)			X(7)			
Prehistoric archaeological sites			X(7)			
<b>Vicinity of Offshore Location</b>						
Essential fish habitat		X	X		X(6)	
Marine and pelagic birds	X				X	X
Public health and safety					(5)	
<b>Coastal and Onshore</b>						
Beaches					X(6)	X
Wetlands					X(6)	
Shore birds and coastal nesting birds					X(6)	
Coastal wildlife refuges					X	
Wilderness areas					X	

## 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
  - o 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 H<sub>2</sub>S 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 MP126**

Proposed operations consist of the drilling, completion and testing of Well Locations A through F.

#### **1. Designated Topographic Features**

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

**Physical disturbances to the seafloor and effluents:** MP126 is 66 miles from the closest designated Topographic Features Stipulation Block (Sackett Bank), and therefore no adverse impacts are expected.

**Effluents:** MP126 is 66 miles from the closest designated Topographic Features Stipulation Block (Sackett Bank), and 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 Pogo's Regional OSRP (refer to information submitted in **Appendix F**).

There are no other IPFs (including emissions 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, effluents, and accidents.

**Physical disturbances to the seafloor and effluents:** MP126 is 20 miles from the closest live bottom (pinnacle trend) area, and therefore no adverse impacts are expected.

**Effluents:** MP126 is 20 miles from the closest live bottom (pinnacle trend) area, and 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 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 Pogo's Regional OSRP (refer to information submitted in **Appendix F**).

There are no other IPFs (including emissions 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, effluents, and accidents.

**Physical disturbances to the seafloor and effluents:** MP126 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.

**Effluents:** MP126 is not located in an area characterized by the existence of live bottoms; 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 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 Pogo's Regional OSRP (refer to information submitted in Appendix F).

There are no other IPFs (including emissions 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 between 64 and 84 feet. High-density chemosynthetic communities are found only in water depths greater than 400 m, therefore Pogo's proposed operations in MP126 would not cause impacts to chemosynthetic communities.

### **5. Water Quality**

IPFs that could result in water quality degradation from the proposed operations in MP126 include disturbances to the seafloor, effluents 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.

**Effluents:** Levels of contaminants in drilling muds and cuttings and produced water discharges, discharge-rate restrictions, and monitoring and toxicity testing are regulated by the EPA NPDES permit, thereby eliminating many significant biological or ecological effects. Operational discharges are not expected to cause significant adverse impacts to water quality.

**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 Pogo'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, 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 MP126 include physical disturbances to the seafloor, effluents 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.

**Effluents:** Effluents such as drilling fluids and cuttings discharges contain components and properties which are detrimental to fishery resources. Moderate petroleum and metal contamination of sediments and the water column can occur out to several hundred meters down-current from the discharge point. Offshore discharges are expected to disperse and dilute to very near background levels in the water column or on the seafloor within 3,000 m of the discharge point, and are expected to have negligible effect on 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 shell fish 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 Pogo's Regional OSRP (refer to information submitted in **Appendix F**).

There are no IPFs from emissions, 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 MP126 include emissions, effluents, 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.

**Effluents:** Drilling fluids and cuttings discharges contain components which may be detrimental to marine mammals. Most operational discharges are diluted and dispersed upon release. Any potential impact from drilling fluids would be indirect, either as a result of impacts on prey items or possibly through ingestion in the food chain (API, 1989).

**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).

Pogo 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, "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](mailto: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 Pogo'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 Pogo's OSRP (refer to information submitted in accordance with Appendix F).

There are no other IPFs (including physical disturbances to the seafloor) 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, effluents, 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; Lohofener 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.

**Effluents:** Drilling fluids and cuttings discharges are not known to be lethal to sea turtles. Most operational discharges are diluted and dispersed upon release. Any potential impact from drilling fluids would be indirect, either as a result of impacts on prey items or possibly through ingestion in the food chain (API, 1989).

**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). Pogo 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, "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](mailto: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 Pogo's Regional Oil Spill Response Plan (refer to information submitted in accordance with **Appendix F**).

There are no other IPFs (including physical disturbances to the seafloor) from the proposed activities which could impact sea turtles.

## **9. Air Quality**

There would be a limited degree of air quality degradation in the immediate vicinity of the proposed activities. Plan Emissions (Complex Total Emissions are the same as Plan Emissions) for the proposed activities do not exceed the annual exemption levels as set forth by MMS. There are no other IPFs (including effluents, physical disturbances to the seafloor, wastes sent to shore for treatment or disposal, or accidents) 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 MP126 are disturbances to the seafloor. MP126 is located within the area designated by MMS as high-probability for occurrence of shipwrecks. Pogo 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 MP126 are physical disturbances to the seafloor and accidents (oil spills).

**Physical Disturbances to the seafloor:** MP126 is located inside the Archaeological Prehistoric high probability lines. Pogo 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 Pogo'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 MP126 include physical disturbances to the seafloor, effluents 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).

**Effluents:** 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 operational waste discharges. Levels of contaminants in drilling muds and cuttings and produced-water discharges, discharge-rate restrictions, and monitoring and toxicity testing are regulated by the EPA NPDES permit, thereby eliminating many significant biological or ecological effects. Operational discharges are not expected to cause significant adverse impacts to EFH.

**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 Pogo's Regional OSRP (refer to information submitted in **Appendix F**).

There are no other IPFs (including emissions, 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 these 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 Pogo's Regional OSRP (refer to information submitted in **Appendix F**).

**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). Pogo 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, "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, and 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<sub>2</sub>S releases) from the proposed activities which could cause impacts to public health and safety. In accordance with 30 CFR 250.417(c) and 2002-G08, sufficient information is included in **Appendix C** to justify our request that our proposed activities be classified by MMS as H<sub>2</sub>S 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 Pogo's Regional OSRP (refer to information submitted in **Appendix F**).

**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). Pogo 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, "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 close distance to shore (17 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 Pogo'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**

Pass A Loutre WMA (17 miles from MP126), Breton Sound NWR (19 miles) and Delta NWR (21 miles) are highly productive habitats for wildlife. Thousands of shore birds use these refuges as wintering areas. Wading birds nest on the refuges. These areas provide habitat 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 17, 19 and 21 miles, Pogo 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). Pogo 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, "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 that could cause impacts to shore birds and coastal nesting birds.

### **4. Coastal Wildlife Refuges**

MP126 is approximately 17 miles from Pass A Loutre WMA, 19 miles from Breton Sound NWR and 21 miles from Delta NWR. Management goals of the NWRs 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 these coastal wildlife refuges 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.

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 Pogo'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 (> 100 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 Pogo'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.

#### **(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.
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Although not cited, the following were utilized in preparing this EIA:

- Hazard Surveys
- MMS EIS's:
  - 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 ZONE MANAGEMENT CONSISTENCY INFORMATION**

A certificate of Coastal Zone Management Consistency for the State of Louisiana is enclosed as *Attachment I-1*.

**COASTAL ZONE MANAGEMENT  
CONSISTENCY CERTIFICATION  
INITIAL EXPLORATION PLAN  
MAIN PASS 126  
OCS-G 25020**

The proposed activities described in detail in this OCS Plan comply with Louisiana's approved Coastal Management Program(s) and will be conducted in a manner consistent with such Program(s).  
Relevant Enforceable Policies were considered for the Consistency.

Pogo Producing Company

Lessee or Operator



Certifying Official

09/11/03

Date

As authorized by the Federal Coastal Zone Management Act (CZMA), The State of Mississippi developed a Coastal Management Program (CMP) to allow for the review of proposed Federal license and permit activities affecting any coastal use or resources, in or outside of the Mississippi Coastal Zone.

The OCS related oil and gas exploratory and development activities having potential impact on the Mississippi Coastal Zone are based on the location of the proposed facilities, access to those sites, best practical techniques for drilling locations, drilling equipment guidelines for the prevention of adverse environmental effects, effective environmental protection, emergency plans and contingency plans.

Below are goals identified by the State of Mississippi and our comments and/or corresponding cross references:

### **Mississippi Coastal Program (MCP) Enforceable Policies**

**Goal 1:** To provide for reasonable industrial expansion in the coastal area and to ensure the efficient utilization of waterfront industrial sites so that suitable sites are conserved for water dependent industry.

The activities proposed in this plan are based out of Venice, Louisiana. The activities will not provide any industrial expansion on the coastal area of Mississippi. Therefore Mississippi coastal areas will be conserved for water dependent industry.

**Goal 2:** To favor the preservation of the coastal wetlands and ecosystems, except where a specific alteration of specific coastal wetlands would serve a higher public interest in compliance with the public purposes of the public trust in which the coastal wetlands are held.

Goal 2 is addressed in Appendix H, Environmental Impact Analysis. The nearest proposed activities will be 54 miles from the Mississippi coast.

**Goal 3:** To protect, propagate and conserve the state's seafood and aquatic life in connection with the revitalization of the seafood industry of the State of Mississippi.

Goal 3 is addressed in Appendix H, Environmental Impact Analysis. Little impact to the seafood industry can be expected due to the activities occurring 54 miles from the Mississippi coast.

**Goal 4:** To conserve the air and waters of the state, and to protect, maintain and improve the quality thereof for public use, for the propagation of wildlife, fish and aquatic life, and for domestic, agricultural, industrial, recreational and other legitimate beneficial uses.

Goal 4 is addressed in Appendix B, General Information, Appendix G, Air Emissions Information, and Appendix H, Environmental Impact Analysis.

**Goal 5: To put to beneficial use to the fullest extent of which they are capable the water resources of the state, and to prevent the waste, unreasonable use, or unreasonable method of use of water.**

The activities proposed in this plan are based in Venice, Louisiana. As such, Mississippi's water resources should not be impacted by the proposed activities. Activities occurring at the sites in the OCS will be conducted in accordance with Pogo's Regional Oil Spill Response Plan referenced in Appendix F of this plan.

**Goal 6: To preserve the state's historical and archaeological resources, to prevent their destruction, and to enhance these resources wherever possible.**

Goal 6 is addressed in Appendix B, General Information, and Appendix H, Environmental Impact Analysis.

**Goal 7: To encourage the preservation of natural scenic qualities in the coastal area.**

Goal 7 is addressed in Appendix E, Waste Discharges Information, Appendix F, Oil Spill Information, Appendix G, Air Emissions Information, and Appendix H, Environmental Impact Analysis.


**Goal 8: To assist local governments in the provision of public facilities services in a manner consistent with the coastal program.**

As the proposed activities are located 54 miles from the Mississippi coast and are based out of a shorebase in Venice, Louisiana, local governments should not be affected.

**COASTAL ZONE MANAGEMENT  
CONSISTENCY CERTIFICATION  
INITIAL EXPLORATION PLAN  
MAIN PASS 126  
OCS-G 25020**

The proposed activities described in detail in this OCS Plan comply with Mississippi's approved Coastal Management Program(s) and will be conducted in a manner consistent with such Program(s)

Pogo Producing Company  
Lessee or Operator

  
Certifying Official

09/11/03  
Date

# PLAN INFORMATION FORM

GENERAL INFORMATION									
Type of OCS Plan:	X	Initial Exploration Plan (EP)	Development Operations Coordination Document (DOCD)						
Company Name:	Pogo Producing Company			MMS Operator Number: 00231					
Address:	5 Greenway Plaza Suite 2700 Houston, TX 77046			Contact Person: Valerie D. land Phone Number: 281.578.3388 Email Address: Valerie.land@jccteam.com					
Lease:	G25020	Area:	Main Pass	Block:	126	Project Name (If Applicable): N/A			
Objective(s):	<input checked="" type="checkbox"/> Oil	<input type="checkbox"/> Gas	<input type="checkbox"/> Sulphur	<input type="checkbox"/> Salt	Onshore Base:	Venice, LA	Distance to Closest Land (Miles): 19		
<b>Description of Proposed Activities (Mark all that apply)</b>									
<input checked="" type="checkbox"/> Exploration drilling					<input type="checkbox"/> Development drilling				
<input checked="" type="checkbox"/> Well completion					<input type="checkbox"/> Installation of production platform				
<input type="checkbox"/> Well test flaring					<input type="checkbox"/> Installation of production facilities				
<input type="checkbox"/> Installation of well protection structure					<input type="checkbox"/> Installation of satellite structure				
<input type="checkbox"/> Installation of subsea wellheads and/or manifolds					<input type="checkbox"/> Installation of lease term pipelines				
<input type="checkbox"/> Temporary well abandonment					<input type="checkbox"/> Commence production				
<input type="checkbox"/> Other (specify and describe)									
Do you propose to use new or unusual technology to conduct your activities?								Yes	X No
Do you propose any facility that will serve as a host facility for deepwater subsea development?								Yes	X No
Do you propose any activities that may disturb an MMS-designated high-probability archaeological area?							X	Yes	No
<b>Tentative Schedule of Proposed Activities</b>									
<b>Proposed Activity</b>						<b>Start Date</b>	<b>End Date</b>	<b>No. of Days</b>	
Drill Well Locations A through F						11/01/03	03/05/04	126	
Complete Well Locations A through F						12/01/04	02/09/05	71	
<b>Description of Drilling Rig</b>						<b>Description of Production Platform</b>			
<input checked="" type="checkbox"/> Jackup			<input type="checkbox"/> Drillship			<input type="checkbox"/> Caisson		<input type="checkbox"/> Tension leg platform	
<input type="checkbox"/> Gorilla Jackup			<input type="checkbox"/> Platform rig			<input type="checkbox"/> Well protector		<input type="checkbox"/> Compliant tower	
<input type="checkbox"/> Semisubmersible			<input type="checkbox"/> Submersible			<input type="checkbox"/> Fixed platform		<input type="checkbox"/> Guyed tower	
<input type="checkbox"/> DP Semisubmersible			<input type="checkbox"/> Other (Attach Description)			<input type="checkbox"/> Subsea manifold		<input type="checkbox"/> Floating production system	
<input type="checkbox"/> Drilling Rig Name (If Known):						<input type="checkbox"/> Spar		<input type="checkbox"/> Other (Attach description)	

**WELL INFORMATION FORM**  
(USE SEPARATE FORM FOR EACH LEASE)

**PROPOSED WELL/STRUCTURE LOCATIONS**

WELL / STRUCTURE NAME	SURFACE LOCATION	BOTTOM-HOLE LOCATION (FOR WELLS)	
<b>Proposed Well Location "A"</b>	CALLS: 5600' F S Land 1650' F W L OF LEASE OCS G25020 , MAIN PASS AREA,		
	BLOCK 126		
	X: 2,799,250		
	Y: 283,680		
	LAT: 29° 25' 21.657" LONG: 88° 49' 21.689"		
	TVD (IN FEET):	MD (IN FEET):	WATER DEPTH (IN FEET): 62'
<b>Proposed Well Location "B"</b>	CALLS: 5600' F S Land 1650' F W L OF LEASE OCS G25020 , MAIN PASS AREA,		
	BLOCK 126		
	X: 2,799,250		
	Y: 283,680		
	LAT: 29° 25' 21.657" LONG: 88° 49' 21.689"		
	TVD (IN FEET):	MD (IN FEET):	WATER DEPTH (IN FEET): 62'
<b>Proposed Well Location "C"</b>	CALLS: 5600' F S Land 1650' F W L OF LEASE OCS G25020 , MAIN PASS AREA,		
	BLOCK 126		
	X: 2,799,250		
	Y: 283,680		
	LAT: 29° 25' 21.657" LONG: 88° 49' 21.689"		
	TVD (IN FEET):	MD (IN FEET):	WATER DEPTH (IN FEET): 62'
<b>Proposed Well Location "D"</b>	CALLS: 5100' F S Land 5400' F W L OF LEASE OCS G25020 , MAIN PASS AREA,		
	BLOCK 126		
	X: 2,803,000		
	Y: 283,180		
	LAT: 29° 25' 15.893" LONG: 88° 48' 39.421"		
	TVD (IN FEET):	MD (IN FEET):	WATER DEPTH (IN FEET): 70'

Proposed Well Location "E"	CALLS: 5100' F S Land 5400' F W L OF LEASE OCS G25020 , MAIN PASS AREA,			
	BLOCK 126			
	X: 2,803,000			
	Y: 283,180			
	LAT: 29° 25' 15.893"			
Proposed Well Location "F"	LONG: 88° 48' 39.421"			
	TVD (IN FEET):	MD (IN FEET):		WATER DEPTH (IN FEET): 70'
	CALLS: 12000' F S Land 4900' F W L OF LEASE OCS G25020 , MAIN PASS AREA,			
	BLOCK 126			
	X: 2,802,500			
	Y: 290,080			
	LAT: 28° 38' 36.162"			
	LONG: 88° 49' 54.895"			
	TVD (IN FEET):	MD (IN FEET):		WATER DEPTH (IN FEET): 62'