UNITED STATES GOVERNMENT
MEMORANDUM

April 23, 2004

To: Public Information (MS 5034)

From: Plan Coordinator, FO, Plans Section (MS 5231)

Subject: Public Information copy of plan

Control #	-	S-06416
Type	-	Supplemental Development Operations Coordinations Document
Lease(s)	-	OCS-G02947 Block - 73 Main Pass Area
Operator	-	Pogo Producing Company
Description	-	Sturcture No. 5
Rig Type	-	BARGE

Attached is a copy of the subject plan.

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

Robert Stringfellow
Plan Coordinator

Site Type/Name	Botm Lse/Area/Blk	Surface Location	Surf Lse/Area/Blk
WP/NO. 5		1305 FSL, 1801 FEL	G02947/MP/73
WELL/NO. 5	G02947/MP/73	1305 FSL, 1801 FEL	G02947/MP/73

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NOTED - SCHEXNAILDRE

PUBLIC COPY
April 20, 2004

CONTROL No. S-6416
REVIEWER: Robert Stringfellow
PHONE: (504) 736-2437

SUPPLEMENTAL DEVELOPMENT OPERATIONS COORDINATION DOCUMENT

Lease Number (s):	OCS-G 2947
Area/Block:	Main Pass Block 73
Prospect Name:	None
Offshore:	Louisiana and Mississippi

Submitted by:

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

Steve Partain
(713) 297-5000
partains@pogoproducing.com

MINERALS MANAGEMENT SERVICE
RECEIVED
APR 22 2004
FIELD OPERATIONS
Section, GOM OCS Region, New Orleans, LA

Estimated start up date: July 15, 2004

Authorized Representative:
Valerie Land
J. Connor Consulting, Inc.
16225 Park Ten Place, Suite 700
Houston, Texas 77084
(281) 578-3388
valerie.land@jccteam.com

No. Copies Being Submitted:
Proprietary: 5
Public Info: 6

For MMS:
Plan No. _____
Assigned to: _____

POGO PRODUCING COMPANY

SUPPLEMENTAL

DEVELOPMENT OPERATIONS COORDINATON DOCUMENT

LEASE OCS-G 2947

MAIN PASS BLOCK 73

APPENDIX A
CONTENTS OF PLAN

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

(A) DESCRIPTION, OBJECTIVES AND SCHEDULE

This DOCD provides for installation of a well protector type structure over the existing surface location of Well No. 5, installation of lease term pipelines, and commencement of production from the target sands as detailed in Appendix C of this DOCD. Well No. 5 will be completed under the previously approved Exploration Plan (Control No. S-6017).

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

(B) LOCATION

Included as ***Attachments A-1*** and ***A-2*** are the well location plat and table showing the existing surface location of Well No. 5. Also included as ***Attachment A-3*** is the bathymetry map depicting water depths across the block.

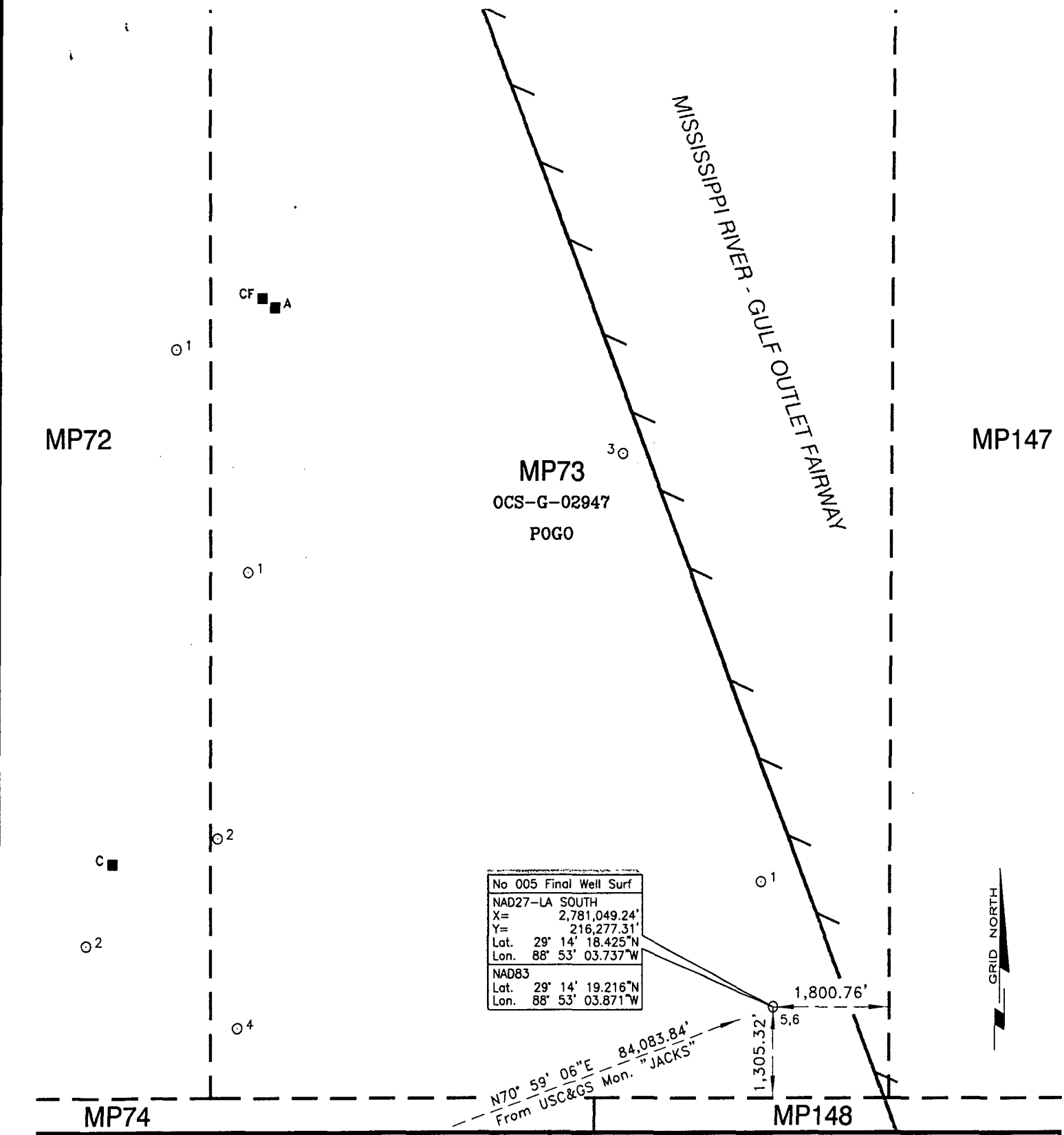
(C) PRODUCTION FACILITIES

A 3-slot well protector tripod structure will be installed at the existing surface location of Well No. 5. A typical schematic of the proposed structure is included as ***Attachment A-4***. Also included as ***Attachment A-5*** is an anchor pattern plot showing the maximum anchor spread of the associated barge being used to install the subject structure.

Pogo will not be installing any processing equipment on this structure. Production from Well No. 5 will flow full well stream via a proposed lease term pipeline to Platform "A" in this same block for processing.

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 industry 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.



I HEREBY CERTIFY THAT THE ABOVE FINAL WELL SURFACE LOCATION IS CORRECT.

STATE OF LOUISIANA
STEPHEN R. HENRY
REG. No. 4903
REGISTERED PROFESSIONAL LAND SURVEYOR

Stephen Henry

REG. PROFESSIONAL LAND SURVEYOR NO. 4401
STATE OF LOUISIANA

NOTES:

1) SURVEYED COORDINATES TRANSFORMED FROM NAD83 (GPS DATUM) TO NAD27 (CHART DATUM) USING NADCON VERSION 2.1.

Attachment A-1

PUBLIC INFORMATION

Printed: 4/16/04

POGO PRODUCING COMPANY

FINAL LOCATION
OCS-G-02947 WELL NO. 005

BLOCK 73
MAIN PASS AREA
GULF OF MEXICO

FUGRO CHANCE INC.
200 Dulles Dr. Lafayette, Louisiana 70506-3001 (337) 237-1500

GEODETIC DATUM: NAD 1927 PROJECTION: LOUISIANA SOUTH GRID UNITS: US SURVEY FEET		SCALE IN FEET 0 2,000'	
Job No.: 04-1307	Date: 4/16/04	Drwn: VAG	Chart: 1 Of: 1
Dwgfile: O:\WellPermit\LAs\MP\Permit\73f5			

WELL INFORMATION FORM
(USE SEPARATE FORM FOR EACH LEASE)

PROPOSED WELL/STRUCTURE LOCATIONS

<table>
<tr><th>WELL / STRUCTURE NAME</th><th colspan="2">SURFACE LOCATION</th><th colspan="2">BOTTOM-HOLE LOCATION (FOR WELLS)</th></tr>
<tr><td rowspan="4">Well No. 5</td><td colspan="2">CALLS: 1305.32' F S L and 1800.76' F E L OF
LEASE OCS G02947 , Main Pass AREA,
BLOCK 73</td><td colspan="2"></td></tr>
<tr><td colspan="2">X: 2,781,049.24'
Y: 216,277.31'</td><td colspan="2"></td></tr>
<tr><td colspan="2">LAT: 29° 14' 18.425"
LONG: 88° 53' 03.737"</td><td colspan="2"></td></tr>
<tr><td>TVD (IN FEET): 8000'</td><td colspan="2">MD (IN FEET): 8106'</td><td>WATER DEPTH (IN FEET): 175'</td></tr>
<tr><td rowspan="4">Platform _ or Well _

Name:</td><td colspan="2">CALLS: F L and F L OF
LEASE OCS , AREA,
BLOCK</td><td colspan="2">CALLS: F L and F L OF
LEASE OCS , AREA,
BLOCK</td></tr>
<tr><td colspan="2">X:
Y:</td><td colspan="2">X:
Y:</td></tr>
<tr><td colspan="2">LAT:
LONG:</td><td colspan="2">LAT:
LONG:</td></tr>
<tr><td>TVD (IN FEET):</td><td colspan="2">MD (IN FEET):</td><td>WATER DEPTH (IN FEET):</td></tr>
<tr><td rowspan="4">Platform _ or Well _

Name:</td><td colspan="2">CALLS: F L and F L OF
LEASE OCS , AREA,
BLOCK</td><td colspan="2">CALLS: F L and F L OF
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BLOCK</td></tr>
<tr><td colspan="2">X:
Y:</td><td colspan="2">X:
Y:</td></tr>
<tr><td colspan="2">LAT:
LONG:</td><td colspan="2">LAT:
LONG:</td></tr>
<tr><td>TVD (IN FEET):</td><td colspan="2">MD (IN FEET):</td><td>WATER DEPTH (IN FEET):</td></tr>
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LEASE OCS , AREA,
BLOCK</td><td colspan="2">CALLS: F L and F L OF
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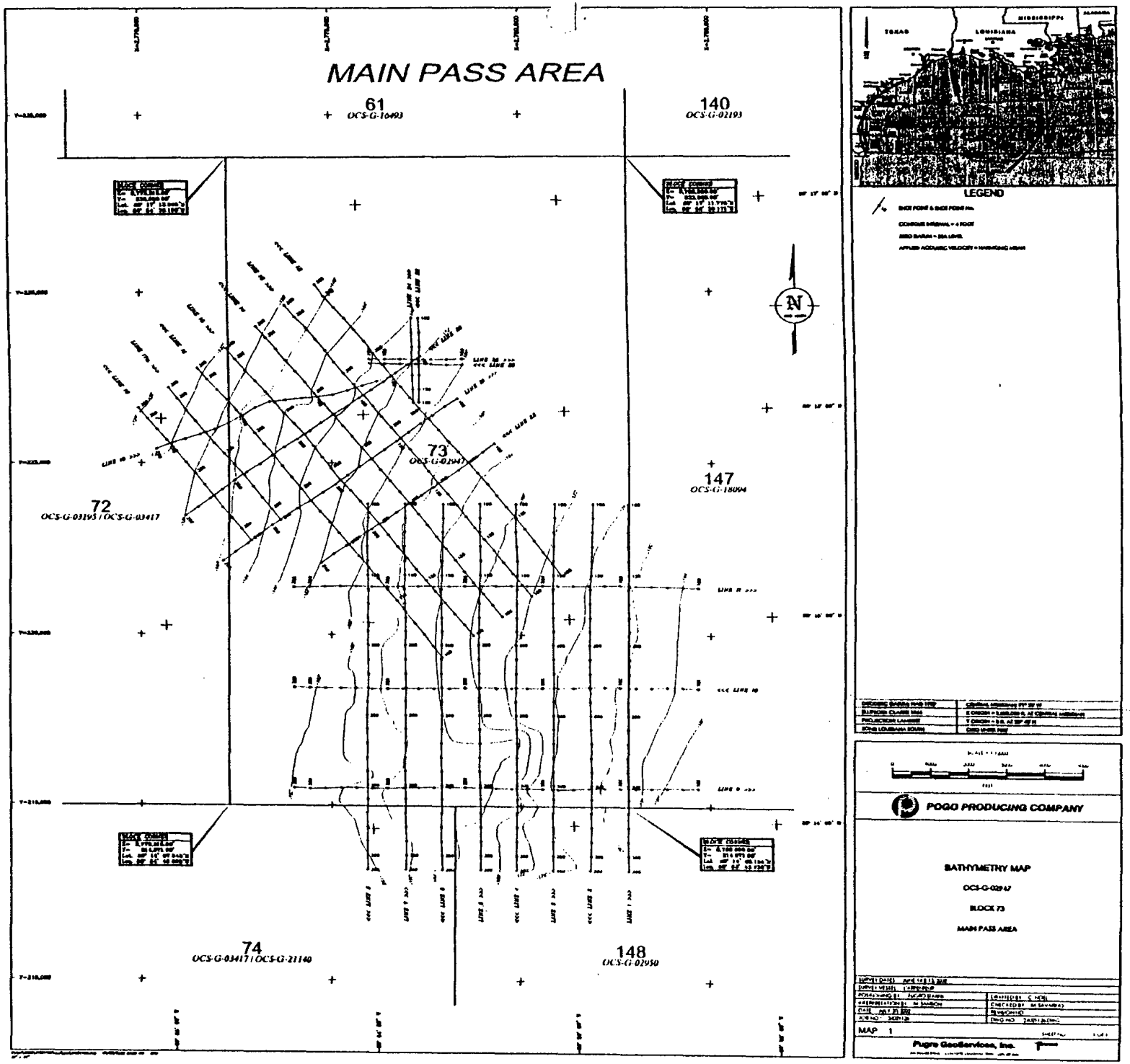
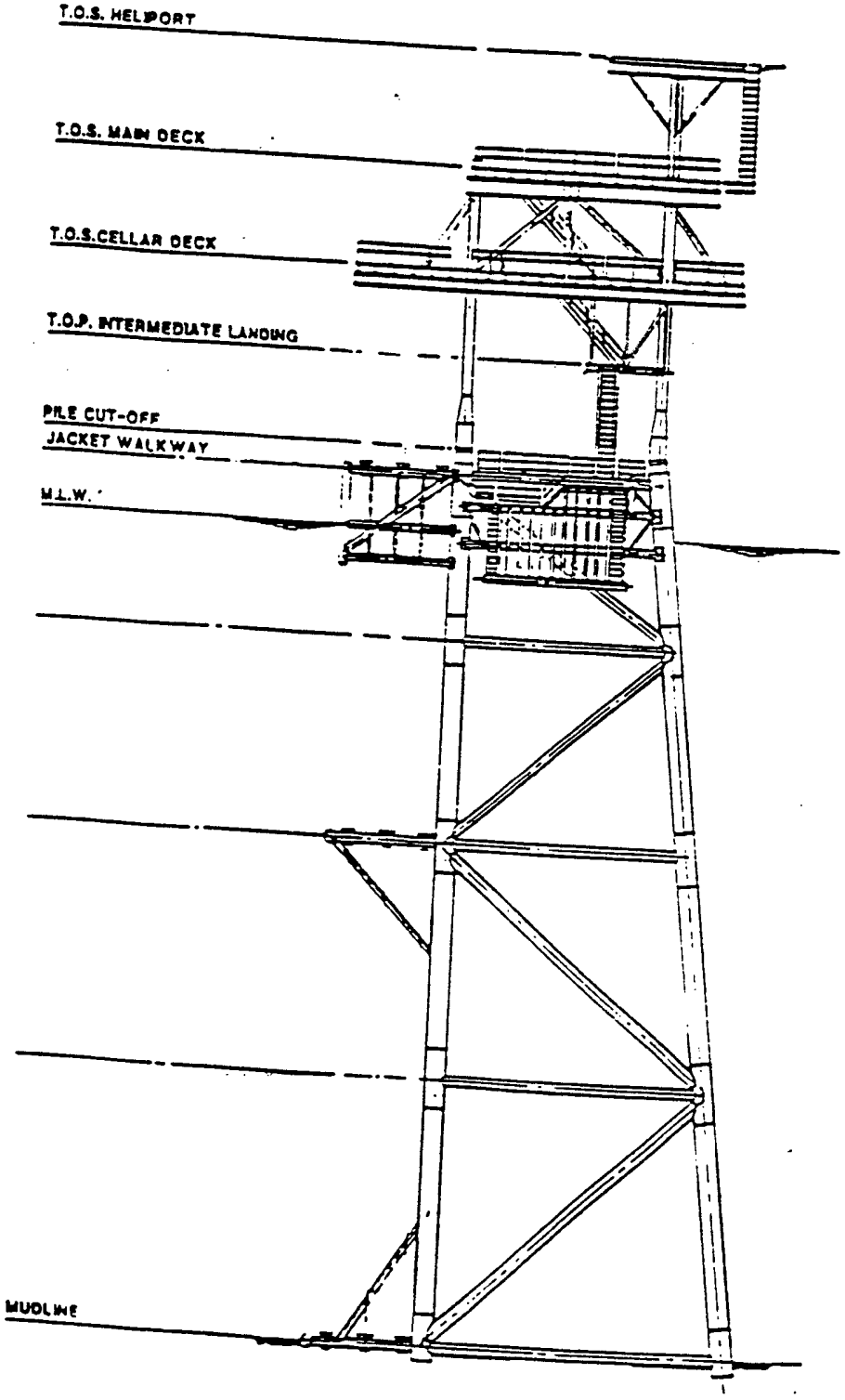
BLOCK</td></tr>
<tr><td colspan="2">X:
Y:</td><td colspan="2">X:
Y:</td></tr>
<tr><td colspan="2">LAT:
LONG:</td><td colspan="2">LAT:
LONG:</td></tr>
<tr><td>TVD (IN FEET):</td><td colspan="2">MD (IN FEET):</td><td>WATER DEPTH (IN FEET):</td></tr>
</table>

Attachment A-2

ATTACHMENT A-3

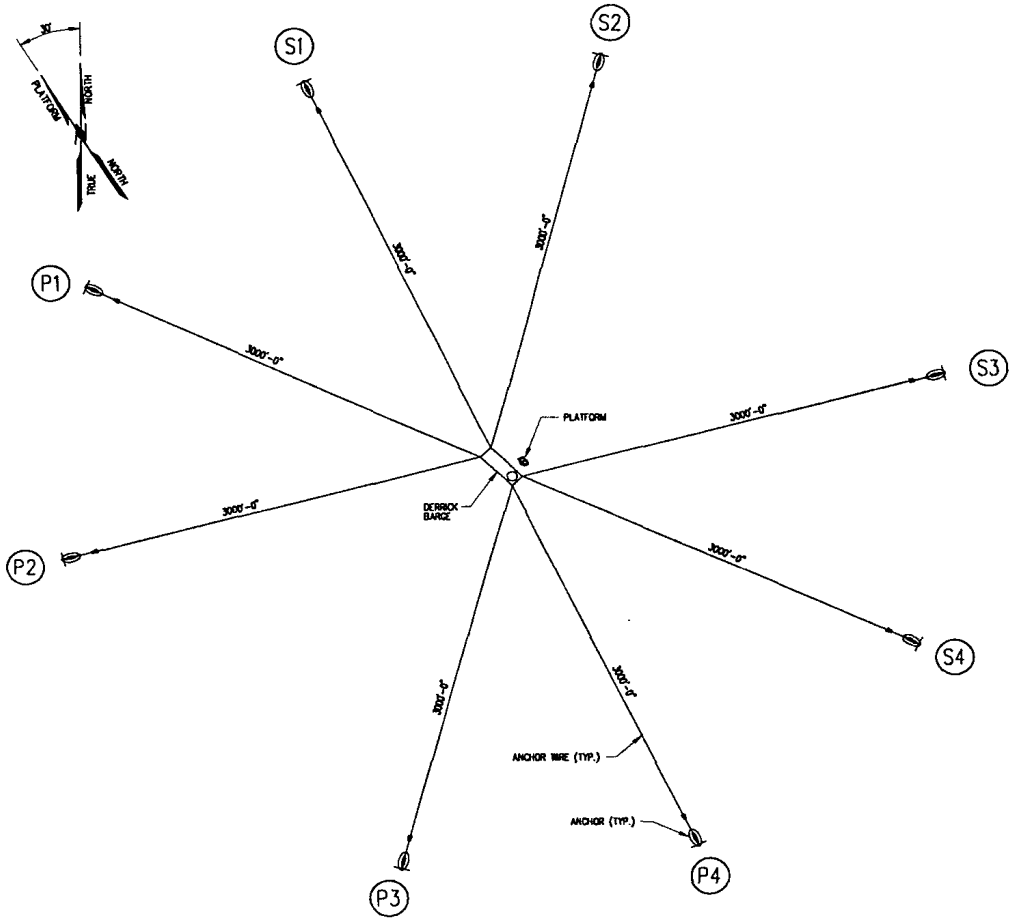


TYPICAL TRIPOD PRODUCTION PLATFORM SCHEMATIC

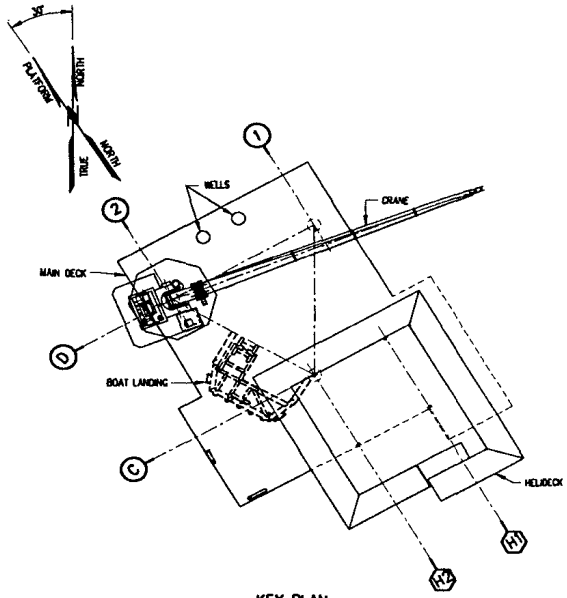


SCALE: 1/16" = 1'-0"

Attachment A-4



ANCHOR PLAN
SCALE: 1" = 400'-0"



KEY PLAN
SCALE: 3/32" = 1'-0"

NOTES:

MARK	REVISION	DATE	DRAFT	CHK'D.	APP'D.
	ISSUED FOR APPROVAL	4/13/04	JM	JR	RC

POGO PRODUCING COMPANY

TECHNICAL ENGINEERING CONSULTANTS
METAIRIE, LOUISIANA

APPROVED	DATE
1/13/04	
RIG	4/12/04
RIG	4/12/04
LA	4/13/04

TITLE: TRIPOD WELL PROTECTOR PLATFORM
MAIN PASS BLK. 73 176'-0" W.D.
DERRICK BRACE
TYPICAL ANCHOR SPREAD

CLIENT: POGO PRODUCING COMPANY
JOB NO.: 4046
DWG. NO.: 001

Attachment A-5

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

(B) PRODUCTION RATES AND LIFE OF RESERVOIR

Type of Production	Average Estimated Rates	Estimated Peak
1) Crude Oil		
2) Gas		
3) Condensate		
Estimated Life of the Reservoir		

(C) NEW OR UNUSUAL TECHNOLOGY

Pogo does not propose to use any new or unusual technology to carry out the proposed development/production 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 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.

(E) ONSHORE BASE AND SUPPORT VESSELS

A Vicinity Map is included as ***Attachment B-1*** showing Main Pass Block 73 located approximately 8 miles from the nearest shoreline and approximately 28 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	
	Drilling & Completion	**Production Operations**
Crew Boat	NA	3
Supply Boat	NA	0
Helicopter	NA	3

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

(F) LEASE STIPULATIONS

The following lease stipulation is attached to Lease OCS-G 2947, Main Pass Block 73:

ARCHAEOLOGY SURVEY BLOCKS

Main Pass Block 73 has been determined to have a high potential for containing historic and prehistoric archaeological properties, therefore a Cultural Resources Report is required. A copy of this report was submitted under the previously approved Exploration Plan.

(G) SPECIAL CONDITIONS

1. Marine Protected Species

Pogo 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.

(G) RELATED OCS FACILITIES AND OPERATIONS

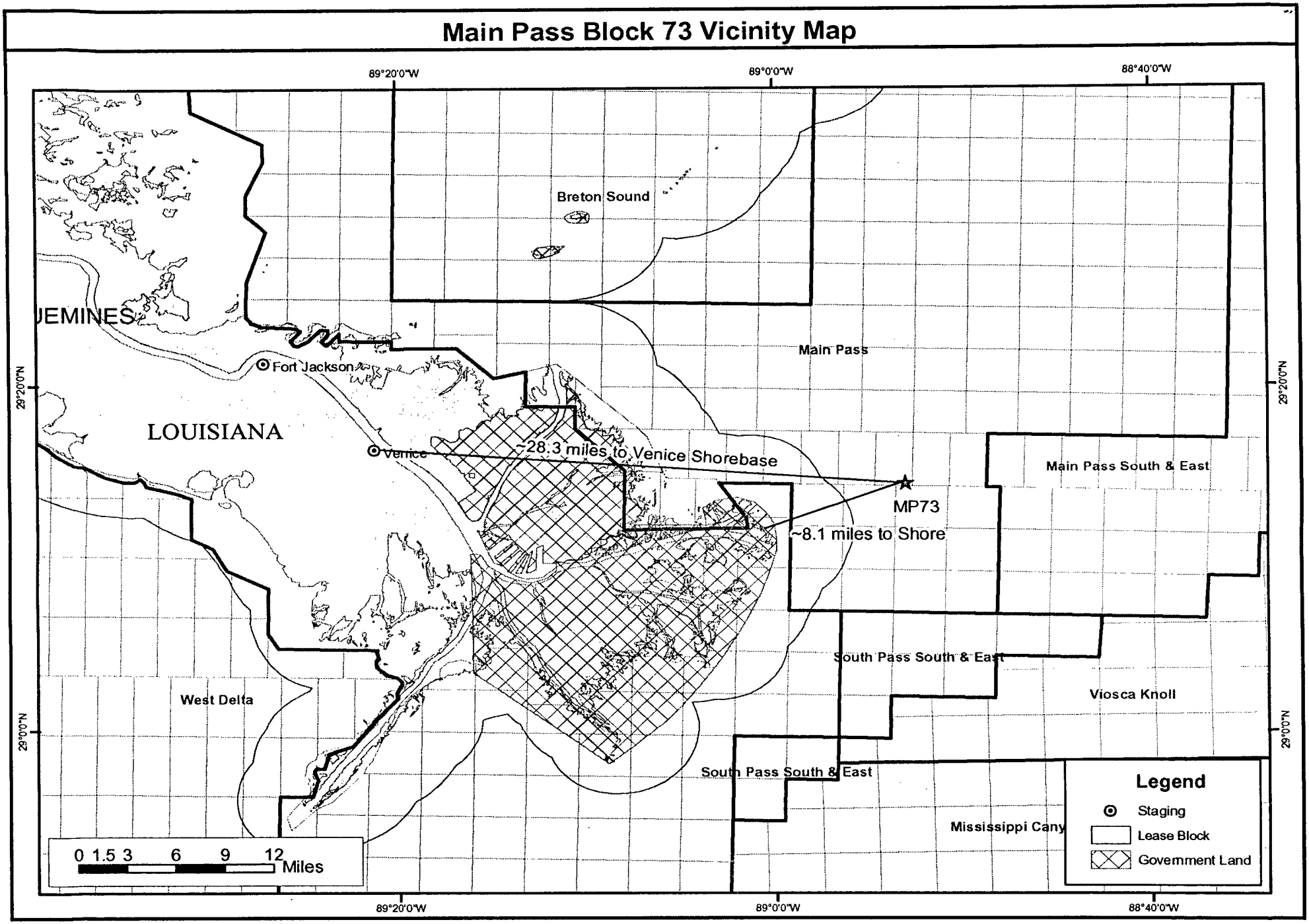
Pogo will utilize existing Platform A in this same block for processing production from Well No. 5. The existing Platform A is a fixed four (4) pile production platform located northwest of Pogo's proposed operations. A 4.5" bulk oil lease term pipeline will carry full well stream production from Well No. 5 to Platform A and is designed for a maximum flow rate of 5 MMCF/D and 5000 BOPD. Should a leak occur, the pipeline will shut-in 45 seconds after detection. A 2.375" lease term pipeline will be used to transport gas from Platform A to Well No. 5 for gas lift purposes, if needed.

(H) TRANSPORTATION INFORMATION

No new construction of transportation lines will be used to carry the production from Well No. 5 to shore.

Attachment B-1

Main Pass Block 73 Vicinity Map



APPENDIX C
GEOLOGICAL, GEOPHYSICAL, AND H_2S INFORMATION

(A) STRUCTURE CONTOUR MAPS

Current structure contour maps drawn to the top of each productive hydrocarbon sand, showing the entire lease block, the location of the existing well, and the locations of geological cross-sections are is included as ***Attachments C-1 and C-2.***

(B) HYDROGEN SULFIDE INFORMATION

By letter dated October 10, 2002, Minerals Management Service classified Main Pass Block 73 as an area absent of H_2S occurrences.

APPENDIX D
BIOLOGICAL AND PHYSICAL INFORMATION

CHEMOSYNTHETIC INFORMATION

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

Main Pass Block 73 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).

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.

Waste and Discharges Information

Discharges Table Example (Wastes to be discharged overboard)

Type of Waste Approximate Composition	Amount to be Discharged (volume or rate)	Maximum Discharge Rate	Treatment and/or Storage, Discharge Location
Water-based drilling fluids	NA	NA	No drilling proposed
Drill cuttings associated with water-based fluids	NA	NA	No drilling proposed
Drill cuttings associated with synthetic drilling fluids	NA	NA	No drilling proposed
Muds, cuttings and cement at the seafloor	NA	NA	No drilling proposed
Produced Water	NA	NA	NA
Sanitary wastes	NA	NA	Unmanned structure
Domestic waste	NA	NA	Unmanned structure
Deck Drainage	NA	NA	NA
Well treatment workover or completion fluids	NA	NA	NA
Uncontaminated fresh or seawater	NA	NA	NA
Desalinization Unit Water	NA	NA	NA
Uncontaminated bilge water	NA	NA	NA
Uncontaminated ballast water	NA	NA	NA
Misc. discharges to which treatment chemicals have been added.	NA	NA	NA
Miscellaneous discharges (permitted under NPDES) (excess cement with cementing chemicals)	NA	NA	NA

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

Disposal Table Example (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	NA	NA	NA	No drilling proposed
Spent synthetic-based drilling fluids and cuttings	NA	NA	NA	No drilling proposed
Oil-contaminated produced sand	NA	NA	NA	NA
Waste Oil	40 bbl/yr	0.11 bbl/day	ASCO, Venice, LA	Recycle
Produced water	NA	NA	NA	NA
Produced water	NA	NA	NA	NA
Norm-contaminated wastes	NA	NA	NA	NA
Trash and debris	5 ft^3/mth	.167 ft^3/day	Riverside Recycling, Venice, LA	Transport to landfill.
Chemical product wastes	NA	NA	NA	NA
Chemical product wastes	NA	NA	NA	NA
Workover fluids	150 bbl	2 bbl/day	Facility name, City, State	Transport in Temporary storage of barrels on crew boat or barge

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

APPENDIX F
OIL SPILL INFORMATION

1. REGIONAL OSRP INFORMATION

Pogo Producing Company's Regional Oil Spill Response Plan (OSRP) was approved on January 7, 2004. Activities proposed in this DOCD 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	DOCD WCD
Type of Activity	Production	Production
Facility Location (Area Block)	SP24	MP73
Facility Designation	W-1	Platform
Distance to Nearest Shoreline (miles)	4	8
Volume		
Storage tanks (total)	8000	0
Flowlines (on facility)	0	0
Lease pipelines	NA	137
Uncontrolled blowout	2400	5000
Total Volume	10,400	5137
Type of Oil(s) (crude, condensate, diesel)	Condensate	Crude
API Gravity	40°	27°

Pogo 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 for near-shore production.

Since Pogo has the capability to respond to the worst-case spill scenario included in its regional OSRP approved on January 7, 2004, through October 31, 2005, and since the worst-case scenario determined for our DOCD 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 DOCD.

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)	Jack-up	4132	1	4132	32.4°
Production	NA	NA	NA	NA	NA

5. SPILL RESPONSE SITES

Primary Response Equipment Location	Preplanned Staging Location
Fort Jackson, Louisiana	Venice, Louisiana

6. DIESEL OIL SUPPLY VESSELS

a. Size of fuel supply vessel:	180'
b. Carrying capacity of fuel supply vessel:	82,000 gal
c. Frequency of fuel transfers:	2/month
d Route fuel supply vessel will take:	Venice to MRGO, MP73

7. SUPPORT VESSELS FUEL TANKS

The estimated total storage capacity (maximum per class of vessel in the field at any given time) of fuel tanks on the vessels supporting activities in this Plan are as follows:

Type of Vessels	Number in Field Simultaneously	Estimated Maximum Fuel Tank Storage Capacity
a. Tug Boats	3	75,000 gal/ea.
b. Supply Vessels	0	82,000 gal
c. Service Vessels	0	NA
b. Crew Vessels	3	7250 gal/ea

8. PRODUCED LIQUID HYDROCARBONS TRANSPORTATION VESSELS

Pogo does not propose the transfer of liquid hydrocarbons from well testing activities under this DOCD.

9. OIL- AND SYNTHETIC-BASED DRILLING FLUIDS

Pogo does not propose the use of oil or synthetic based drilling fluids for this DOCD.

10. BLOWOUT SCENARIO

Should a blowout occur, the formation types present in the GOM tend to bridge over in most cases. If the wellhead and BOP system is still in tact, wellbore intervention should be possible in as little as 7 to 10 days. In a relief well scenario, rig availability is typically not an issue. The time required to drill a relief well would be in the 10 day range depending on the well intersection depth.

12. SPILL RESPONSE DISCUSSION FOR NEPA ANALYSIS

For the purpose of Coastal Zone Management Act analysis, the largest spill response originating from the proposed activity would be a blowout during completion operations, which is 5,000 barrels of crude with an API gravity of 27°.

Land Segment and Resource Identification

Trajectories of a spill and the probability of it impacting a land segment have been projected utilizing information in MMS Oil Spill Risk Analysis Model (OSRAM) for the Central and Western Gulf of Mexico available on MMS website. The results are shown in Figure F-1.

The MMS OSRAM identifies a twenty-five percent probability of impact to the shorelines of Plaquemines Parish, Louisiana within ten days. Plaquemines Parish includes Barataria Bay, the Mississippi River Delta, Breton Sound and the affiliated islands and bays. This region is an extremely sensitive habitat, and serves as a migratory, breeding, feeding and nursery habitat for numerous species of wildlife. Beaches in this area vary in grain particle size, and can be classified as either fine sand, shell or perched shell beaches. Sandy and muddy tidal flats are also abundant. Additional discussion of protection strategies for potentially affected resources is included in Pogo's Regional Oil Spill Response Plan.

Response

Pogo will make every effort to respond to the Worst Case Discharge as effectively as possible. A description of the response equipment available to contain and recover the Worst Case Discharge is shown in Figure F-2.

Using the estimated chemical and physical characteristics of condensate, an ADIOS weathering model was run on a similar product from the ADIOS oil database. The results indicate 31% of the product would be evaporated/dispersed within 24 hours, leaving approximately 3,450 barrels on the water.

Figure F-2 outlines equipment, personnel, materials and support vessels as well as temporary storage equipment to be considered in order to cope with an initial spill of 5,000 barrels. The list estimates individual times needed for procurement, load out, travel time to the site and deployment. If appropriate, 4 sorties (8,000 gallons) from the DC-4 and 2 sorties (2,000 gallons) from the DC-3 should disperse approximately 4,286 barrels of oil.

Offshore response strategies may also include attempting to skim utilizing the CGA HOSS barge, one (1) Fast Response Unit (FRU), and the Grand Bay spill response vessel, with a total derated skimming capacity of 51,400 barrels. Temporary storage associated with the identified skimming equipment equals 4,395 barrels. If additional temporary storage is needed, a temporary storage barge may be mobilized. **SAFETY IS FIRST PRIORITY. AIR MONITORING WILL BE ACCOMPLISHED AND OPERATIONS DEEMED SAFE PRIOR TO ANY CONTAINMENT/SKIMMING ATTEMPTS**

If the spill went unabated, shoreline impact in coastal environments would depend upon existing environmental conditions. Onshore response may include the deployment of shoreline boom on beach areas, or protection and sorbent boom in vegetated areas. Strategies would be based upon surveillance and real time trajectories that depict areas of potential impact given actual sea and weather conditions. Strategies from the New Orleans Area Contingency Plans (ACP) and Unified Command would be consulted to ensure that environmental and special economic resources would be correctly identified and prioritized to ensure optimal protection. ACPs depict the protection response modes applicable for oil spill clean-up operations. Each response mode is schematically represented to show optimum deployment and operation of the equipment in areas of environmental concern. Supervisory personnel have the option to modify the deployment and operation of equipment allowing a more effective response to site-specific circumstances.

FIGURE F-1
TRAJECTORY BY LAND SEGMENT

Trajectory of a spill and the probability of it impacting a land segment have been projected utilizing Pogo's WCD and information in MMS Oil Spill Risk Analysis Model (OSRAM) for the Central and Western Gulf of Mexico available on MMS website, using a thirty (30) day impact. The results are tabulated below.

Area/Block	OCS-G	Launch Area	Land Segment and/or Resource	Conditional Probability (%) within 30 days
Completion, Installation & Production 8 miles from shore Main Pass 73		C53	Terrebonne, LA	1
			LaFourche, LA	1
			Plaquemines, LA	**31**
			St. Benard, LA	12
			Hancock & Harrison, MS	2
			Jackson, MS	4
			Mobile, AL	3
			Baldwin, AL	3
			Escambia, FL	3
			Okaloosa, FL	1
			Walton, FL	1
			Bay, FL	1
			Gulf, FL	1

WCD Scenario – Completion Operations – BASED ON A BLOWOUT DURING COMPLETION OPERATIONS (8 miles from shore)
Jack-up Barge, Main Pass 73
5,000 barrels of crude, API Gravity 27°

FIGURE F-2 Equipment Response Time to: Main Pass 73

	EQUIPMENT TYPE	Derated Capacity (BBLS)	Storage (BBLS)	No. of Units	Owner/ Location	Initial Staging	Hours To Staging Area	TOTAL Time to Procure (1)	Time to Load Out (2)	Travel Time (Staging/ Spill) (3)	Time to Deploy (4)	TOTAL Estimated Response Time
A	DC 4 Spray Aircraft	--	--	1	ASI/HOUMA	HOUMA	0					
	DC 3 Spray Aircraft	--	--	1	ASI/HOUMA	HOUMA	0					
	Spotter Plane			1	ASI/HOUMA	HOUMA	0					
	Spotter Personnel			2	ASI/HOUMA	HOUMA	1	1	1	1	0	3
	Dispersant				CGA/HOUMA	HOUMA	0					
B	HOSS Barge	43,000	4,130	1	CGA/HOUMA	HOUMA	1					
	Operators			12	STARS*	HOUMA	2					
	Tugs			2	CENAC Towing/Houma	HOUMA	2	2	0	20	1	23
C	FRU/Expandi	3,400	200	1	CGA/FORT JACKSON	VENICE	0					
	Operators			6	STARS*	VENICE	2					
	Utility Boat			1	Vessel of Opportunity	VENICE	2	2	1	1.5	1	5.5
	Crew Boat			1	Vessel of Opportunity	VENICE	2					
D	Grand Bay Response Vessel	5,000	65	1	CGA/FORT JACKSON	VENICE	.5					
	Operators			3	STARS*	VENICE	2	2	0	1	0	3.5
E	**INITIAL SUPPORT**											
	Spotter Helo	--	--	1	PHI/FORT JACKSON	SPILL SITE	1	1	--	0.5	--	1.5
	Surveillance Helo	--	--	1	PHI/FORT JACKSON	SPILL SITE	1	1	--	0.5	--	1.5
	Hand Held Radios	--	--		STARS*	VENICE	1.5	1.5	--	1	--	2.5
	TOTAL	51,400	4,395									

*STARS contractor called out by MSRC

13. POLLUTION PREVENTION MEASURES

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

APPENDIX G
AIR EMISSIONS INFORMATION

AIR EMISSIONS INFORMATION

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 = distance to shore in miles)?		X
Do your emission calculations include any emission reduction measures or modified emission factors?		X
Does or will the facility complex associated with your proposed development and production activities process production from eight or more wells?	X	
Do you expect to encounter H_2S at concentrations greater than 20 parts per million (ppm)?		X
Do you propose to flare or vent natural gas in excess of the criteria set forth under 250.1105(a)(2) and (3)?		X
Do you propose to burn produced hydrocarbon liquids?		X
Are your proposed development and production activities located within 25 miles from shore?	X	
Are your proposed development and production activities located within 200 kilometers of the Breton Wilderness Area?	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.

Air Pollutant	Plan Emission Amounts[1] (tons)	Calculated Exemption Amounts[2] (tons)	Calculated Complex Total Emission Amounts[3] (tons)
Particular matter (PM)	3.73	266.40	3.73
Sulphur dioxide (SO_2)	17.10	266.40	17.10
Nitrogen oxides (NO_x)	128.12	266.40	128.12
Volatile organic compounds (VOC)	6.96	266.40	6.96
Carbon Monoxide (CO)	27.95	13600.00	27.95

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

This information was calculated by: Valerie Land
(281) 578-3388
valerie.land@jccteam.com

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

DOCD AIR QUALITY SCREENING CHECKLIST

OMB Control No. xxxx-xxxx
Expiration Date: Pending

COMPANY	POGO PRODUCING COMPANY
AREA	MAIN PASS AREA
BLOCK	BLOCK 73
LEASE	OCS-G 2947
PLATFORM	
WELL	5
COMPANY CONTACT	VALERIE LAND
TELEPHONE NO.	(281) 578-3388
REMARKS	Install well protector structure, install lease pipelines, commence production from Well No. 5

"Yes"	"No"	Air Quality Screening Questions
	X	1. Is any calculated Complex Total (CT) Emission amount (in 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	2. Do your emission calculations include any emission reduction measures or modified emission factors?
X		3. Does or will the facility complex associated with your proposed development and production activities process production from eight or more wells?
	X	4. Do you expect to encounter H_2S at concentrations greater than 20 parts per million?
	X	5. Do you propose to flare or vent natural gas in excess of the criteria set forth under 250.1105(a)(2) and (3)?
	X	6. Do you propose to burn produced hydrocarbon liquids?
X		7. Are your proposed development and production activities located within 25 miles from shore?
X		8. Are your proposed development and production activities located within 200 kilometers of the Breton Wilderness Area?

If ALL questions are answered "No":
Fill in the information below about your lease term pipelines and submit only this coversheet with your plan.

If ANY question is answered "Yes":
Prepare and submit a full set of spreadsheets with your plan.

LEASE TERM PIPELINE CONSTRUCTION INFORMATION:		
YEAR	NUMBER OF PIPELINES	TOTAL NUMBER OF CONSTRUCTION DAYS
2004	2	7 days
2005		
2006		
2007		
2008		
2009		
2010		
2011		
2012		
2013		
2014		

AIR EMISSION CUMPUTATION FACTORS

OMB Control No. xxxx-xxxx
Expiration Date: Pending

Fuel Usage Conversion Factors	Natural Gas Turbines		Natural Gas Engines		Diesel Recip. Engine		REF.	DATE
	SCF/hp-hr	9.524	SCF/hp-hr	7.143	GAL/hp-hr	0.0483	AP42 3.2-1	4/76 & 8/84

Equipment/Emission Factors	units	PM	SOx	NOx	VOC	CO	REF.	DATE
NG Turbines	gms/hp-hr		0.00247	1.3	0.01	0.83	AP42 3.2-1& 3.1-1	10/96
NG 2-cycle lean	gms/hp-hr		0.00185	10.9	0.43	1.5	AP42 3.2-1	10/96
NG 4-cycle lean	gms/hp-hr		0.00185	11.8	0.72	1.6	AP42 3.2-1	10/96
NG 4-cycle rich	gms/hp-hr		0.00185	10	0.14	8.6	AP42 3.2-1	10/96
Diesel Recip. < 600 hp.	gms/hp-hr	1	1.468	14	1.12	3.03	AP42 3.3-1	10/96
Diesel Recip. > 600 hp.	gms/hp-hr	0.32	1.468	11	0.33	2.4	AP42 3.4-1	10/96
Diesel Boiler	lbs/bbl	0.084	2.42	0.84	0.008	0.21	AP42 1.3-12,14	9/98
NG Heaters/Boilers/Burners	lbs/mmscf	7.6	0.593	100	5.5	84	P42 1.4-1, 14-2, & 14	7/98
NG Flares	lbs/mmscf		0.593	71.4	60.3	388.5	AP42 11.5-1	9/91
Liquid Flaring	lbs/bbl	0.42	6.83	2	0.01	0.21	AP42 1.3-1 & 1.3-3	9/98
Tank Vapors	lbs/bbl				0.03		E&P Forum	1/93
Fugitives	lbs/hr/comp.				0.0005		API Study	12/93
Glycol Dehydrator Vent	lbs/mmscf				6.6		La. DEQ	1991
Gas Venting	lbs/scf				0.0034			

Sulfur Content Source	Value	Units
Fuel Gas	3.33	ppm
Diesel Fuel	0.4	% weight
Produced Gas(Flares)	3.33	ppm
Produced Oil (Liquid Flaring)	1	% weight

AIR EMISSION CALCULATIONS - FIRST YEAR

OMB Control No. xxxx-xxxx
Expiration Date: Pending

COMPANY	AREA	BLOCK	LEASE	PLATFORM	WELL		CONTACT	PHONE	REMARKS
POGO PRODUCING CO	MAIN PASS AREA	BLOCK 73	OCS-G 2947	0	5		VALERIE LAND	(281) 578-3388	#REF!

OPERATIONS	EQUIPMENT	RATING	MAX. FUEL	ACT. FUEL	RUN TIME		MAXIMUM POUNDS PER HOUR					ESTIMATED TONS				
	Diesel Engines	HP	GAL/HR	GAL/D												
	Nat. Gas Engines	HP	SCF/HR	SCF/D												
	Burners	MMBTU/HR	SCF/HR	SCF/D	HR/D	DAYS	PM	SOx	NOx	VOC	CO	PM	SOx	NOx	VOC	CO
DRILLING	PRIME MOVER>600hp diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	PRIME MOVER>600hp diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	PRIME MOVER>600hp diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	PRIME MOVER>600hp diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	BURNER diesel	0			0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	AUXILIARY EQUIP<600hp diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS>600hp diesel(crew)	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS>600hp diesel(supply)	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS>600hp diesel(tugs)	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PIPELINE INSTALLATION	PIPELINE LAY BARGE diesel	2750	132.825	3187.80	24	7	1.94	8.89	66.63	2.00	14.54	0.16	0.75	5.60	0.17	1.22
	SUPPORT VESSEL diesel	4200	202.86	4868.64	24	7	2.96	13.58	101.76	3.05	22.20	0.25	1.14	8.55	0.26	1.87
	PIPELINE BURY BARGE diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	SUPPORT VESSEL diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS>600hp diesel(crew)	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS>600hp diesel(supply)	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FACILITY INSTALLATION	DERRICK BARGE diesel	19868	959.6244	23030.99	24	15	14.00	64.24	481.38	14.44	105.03	2.52	11.56	86.65	2.60	18.91
	MATERIAL TUG diesel	4200	202.86	4868.64	24	15	2.96	13.58	101.76	3.05	22.20	0.53	2.44	18.32	0.55	4.00
	VESSELS>600hp diesel(crew)	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS>600hp diesel(supply)	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PRODUCTION	RECIP.<600hp diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	RECIP.>600hp diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	SUPPORT VESSEL diesel	2065	99.7395	2393.75	8	45	1.46	6.68	50.03	1.50	10.92	0.26	1.20	9.01	0.27	1.96
	TURBINE nat gas	0	0	0.00	0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
	RECIP.2 cycle lean nat gas	0	0	0.00	0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
	RECIP.4 cycle lean nat gas	0	0	0.00	0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
	RECIP.4 cycle rich nat gas	0	0	0.00	0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
	BURNER nat gas	0	0.00	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	MISC.	BPD	SCF/HR	COUNT												
	TANK-	0			0	0				0.00					0.00	
	FLARE-		0		0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
	PROCESS VENT-		0		0	0				0.00					0.00	
	FUGITIVES-			5000.0		104				2.50					3.12	
	GLYCOL STILL VENT-		0		0	0				0.00					0.00	
DRILLING WELL TEST	OIL BURN	0			0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	GAS FLARE		0		0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
2004	YEAR TOTAL						23.32	106.97	801.57	26.55	174.89	3.73	17.10	128.12	6.96	27.95
EXEMPTION CALCULATION	DISTANCE FROM LAND IN MILES											266.40	266.40	266.40	266.40	13600.00
	8.0															

COMPANY	AREA	BLOCK	LEASE	PLATFORM	WELL		CONTACT	PHONE	REMARKS
POGO PRODUCING CO	MAIN PASS AREA	BLOCK 73	OCS-G 2947	0	5		VALERIE LAND	(281) 578-3388	#REF!

OPERATIONS	EQUIPMENT	RATING	MAX. FUEL	ACT. FUEL	RUN TIME		MAXIMUM POUNDS PER HOUR					ESTIMATED TONS				
	Diesel Engines	HP	GAL/HR	GAL/D												
	Nat. Gas Engines	HP	SCF/HR	SCF/D												
	Burners	MMBTU/HR	SCF/HR	SCF/D	HR/D	DAYS	PM	SOx	NOx	VOC	CO	PM	SOx	NOx	VOC	CO
DRILLING	PRIME MOVER>600hp diesel	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	PRIME MOVER>600hp diesel	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	PRIME MOVER>600hp diesel	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	PRIME MOVER>600hp diesel	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	BURNER diesel	0			0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	AUXILIARY EQUIP<600hp diesel	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS>600hp diesel(crew)	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS>600hp diesel(supply)	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS>600hp diesel(tugs)	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PIPELINE INSTALLATION	PIPELINE LAY BARGE diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	SUPPORT VESSEL diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	PIPELINE BURY BARGE diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	SUPPORT VESSEL diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS>600hp diesel(crew)	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS>600hp diesel(supply)	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FACILITY INSTALLATION	DERRICK BARGE diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	MATERIAL TUG diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS>600hp diesel(crew)	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS>600hp diesel(supply)	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PRODUCTION	RECIP.<600hp diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	RECIP.>600hp diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	SUPPORT VESSEL diesel	2065	99.7395	2393.75	8	156	1.46	6.68	50.03	1.50	10.92	0.91	4.17	31.22	0.94	6.81
	TURBINE nat gas	0	0	0.00	0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
	RECIP.2 cycle lean nat gas	0	0	0.00	0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
	RECIP.4 cycle lean nat gas	0	0	0.00	0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
	RECIP.4 cycle rich nat gas	0	0	0.00	0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
	BURNER nat gas	0	0.00	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	MISC.	BPD	SCF/HR	COUNT												
	TANK-	0			0	0				0.00					0.00	
	FLARE-		0		0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
	PROCESS VENT-		0		0	0				0.00					0.00	
	FUGITIVES-			5000.0		365				2.50					10.95	
	GLYCOL STILL VENT-		0		0	0				0.00					0.00	
DRILLING	OIL BURN	0			0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WELL TEST	GAS FLARE		0		0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
2005	YEAR TOTAL						1.46	6.68	50.03	4.00	10.92	0.91	4.17	31.22	11.89	6.81
EXEMPTION CALCULATION	DISTANCE FROM LAND IN MILES											266.40	266.40	266.40	266.40	13600.00
	8.0															

APPENDIX H
ENVIRONMENTAL IMPACT ANALYSIS (EIA)

Supplemental Development Operations Coordination Document
Main Pass Block 73
OCS-G 2947

(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_2S releases)**	**Discarded Trash & Debris**
Site-specific at Offshore Location						
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)	X
Air quality	X(9)					
Shipwreck sites (known or potential)			(7)			
Prehistoric archaeological sites			X(7)		X	
Vicinity of Offshore Location						
Essential fish habitat			X		X(6)	
Marine and pelagic birds	X				X	X
Public health and safety					(5)	
Coastal and Onshore						
Beaches					X(6)	X
Wetlands					X(6)	
Shore birds and coastal nesting birds					X(6)	X
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 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 Main Pass Block 73

Proposed operations consist of the installation of a well protector structure, the installation of two lease term pipelines, and the commencement of production from Well No. 5.

1. Designated Topographic Features

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

Physical disturbances to the seafloor and effluents: Main Pass Block 73 is 60 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 Oil Spill Response Plan (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: Main Pass Block 73 is 24 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 Oil Spill Response Plan (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: Main Pass Block 73 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 Pogo's Regional Oil Spill Response Plan (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 175 feet. High-density chemosynthetic communities are found only in water depths greater than 1,312 feet (400 meters), therefore Pogo's proposed operations in Main Pass Block 73 would not cause impacts to chemosynthetic communities.

5. Water Quality

IPFs that could result in water quality degradation from the proposed operations in Main Pass Block 73 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 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, 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 Main Pass Block 73 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 Pogo's Regional Oil Spill Response (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 Main Pass Block 73 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).

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. 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 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 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 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). 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. 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 and effluents) from the proposed activities which could impact sea turtles.

9. Air Quality

Main Pass Block 73 is located 33 miles from the Breton Wilderness Area and 8 miles from shore. Applicable emissions data is included in Appendix G of the Plan.

There would be a limited degree of air quality degradation in the immediate vicinity of the proposed activities. Plan Emissions for the proposed activities do not exceed the annual exemption levels as set forth by MMS. 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 Main Pass Block 73 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 would impact air quality.

10. Shipwreck Sites (known or potential)

IPFs that could impact known or unknown shipwreck sites as a result of the proposed operations in Main Pass Block 73 include disturbances to the seafloor. Main Pass Block 73 is located in an OCS block designated by MMS as having a high probability for occurrence of shipwrecks. Company 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 which could impact shipwreck sites.

11. Prehistoric Archaeological Sites

IPFs that could cause impacts to prehistoric archaeological sites as a result of the proposed operations in Main Pass Block 73 are disturbances to the seafloor and accidents (oil spills).

Disturbances to the seafloor: Main Pass Block 73 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 Main Pass Block 73 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 Pogo's Regional Oil Spill Response Plan (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 Pogo's Regional Oil Spill Response Plan (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_2S release) from the proposed activities which could cause impacts to public health and safety.

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 distance from shore (8 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 Oil Spill Response Plan (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 distance from shore (8 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 Oil Spill Response Plan (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 (8 miles from Main Pass Block 73) is a highly productive habitat for wildlife. Thousands of shore birds use the refuge as a wintering area. Also, wading birds nest on the refuge. The Pass A Loutre WMA provides 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 8 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

Main Pass Block 73 is approximately 8 miles from the Pass A Loutre WMA. Management goals of the Pass A Loutre 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 Pogo's Regional Oil Spill Response Plan (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 (15 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 Oil Spill Response Plan (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

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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 MANAGEMENT CONSISTENCY INFORMATION

Relevant enforceable policies were considered in certifying consistency for Louisiana. A certificate of Coastal Management Consistency for the State of Louisiana is enclosed as ***Attachment I-1***.

COASTAL ZONE MANAGEMENT
CONSISTENCY CERTIFICATION
SUPPLEMENTAL
DEVELOPMENT OPERATIONS COORDINATION DOCUMENT
MAIN PASS BLOCK 73
OCS-G 2947

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

Pogo Producing Company

Lessee or Operator

Certifying Official

04/20/04
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 67 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 67 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 67 miles from the Mississippi coast and are based out of a shorebase in Venice, Louisiana, local governments should not be affected.

COASTAL MANAGEMENT
CONSISTENCY CERTIFICATION
SUPPLEMENTAL
DEVELOPMENT OPERATIONS COORDINATION DOCUMENT
MAIN PASS BLOCK 73
OCS-G 2947

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

Pogo Producing Company
Lessee or Operator

Steve C Pate
Certifying Official

04/20/04
Date

PLAN INFORMATION FORM

GENERAL INFORMATION

Type of OCS Plan:		Exploration Plan (EP)	X	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 Land Phone Number: (281) 578-3388 Email Address: valerie.land@jccteam.com		
Lease: G02947	Area: Main Pass	Block: 73	Project Name (If Applicable): NA	
Objective(s): ☒ Oil ☐ Gas ☐ Sulphur ☐ Salt		Onshore Base: Venice, LA	Distance to Closest Land (Miles): 8	

Description of Proposed Activities (Mark all that apply)

☐ Exploration drilling	☐ Development drilling
☐ Well completion	☐ Installation of production platform
☐ Well test flaring	☐ Installation of production facilities
☒ Installation of well protection structure	☐ Installation of satellite structure
☐ Installation of subsea wellheads and/or manifolds	☒ Installation of lease term pipelines
☐ Temporary well abandonment	☒ Commence production
☐ 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

Tentative Schedule of Proposed Activities

Proposed Activity	Start Date	End Date	No. of Days
Install Well Protector Structure	08/01/04	08/15/04	15 days
Complete Well No. 5 (under previous Exploration Plan)	08/23/04	09/12/04	21 days
Install Lease Term Pipelines	07/15/04	08/01/04	18 days
Commence Production of Well No. 5	09/19/04		

Description of Drilling Rig

☐ Jackup	☐ Drillship	
☐ Gorilla Jackup	☐ Platform rig	
☐ Semisubmersible	☐ Submersible	
☐ DP Semisubmersible	☐ Other (Attach Description)	
☐ Drilling Rig Name (If Known):		

Description of Production Platform

☐ Caisson	☐ Tension leg platform
☒ Well protector	☐ Compliant tower
☐ Fixed platform	☐ Guyed tower
☐ Subsea manifold	☐ Floating production system
☐ Spar	☐ Other (Attach description)

Description of Lease Term Pipelines

From (Facility/Area Block)	T0 (Facility/Area Block)	Diameter (inches)	Length (Feet)	Product
MP73, #5	MP73, "A"	4.5"	14,000'	Bulk Oil
MP73, "A"	MP73, #5	2.375"	14,000.'	Gas Lift