

UNITED STATES GOVERNMENT
MEMORANDUM

January 31, 2005

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

Subject: Public Information copy of plan
Control # - N-08328
Type - Initial Exploration Plan
Lease(s) - OCS-G22562 Block - 542 West Cameron Area
Operator - St. Mary Energy Company
Description - Wells A, B, and C
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.

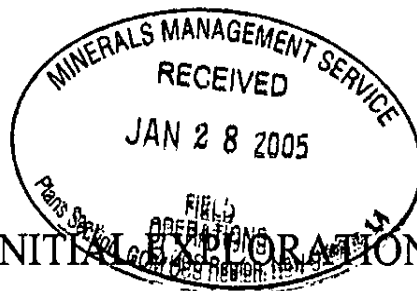


Elmo Cooper
Plan Coordinator

Site Type/Name	Botm Lse/Area/Blk	Surface Location	Surf Lse/Area/Blk
WELL/A	G22562/WC/542	400 FNL, 3600 FWL	G22562/WC/542
WELL/B	G22562/WC/542	650 FNL, 5200 FWL	G22562/WC/542
WELL/C	G22562/WC/542	1050 FNL, 4200 FWL	G22562/WC/542

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PUBLIC COPY

January 27, 2005

INITIAL EXPLORATION PLAN

Lease Number: OCS-G 22562
Area/Block: West Cameron Block 542
Prospect Name: N/A
Offshore: Louisiana

Submitted by: St. Mary Energy Company
580 Westlake Park Blvd.
Suite 600
Houston, Texas 77079

Chuck Jones / Doug Selvius
281-677-2771 / 281-677-2790
cjones@stmaryland.com

Estimated start up date: April 1, 2005

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

No. Copies Being Submitted:

Proprietary: 5
Public Info: 4

For MMS:
Plan No. N-8328
Assigned to: ELMO COOPER

ST. MARY ENERGY COMPANY

INITIAL EXPLORATION PLAN

LEASE OCS-G 22562

WEST CAMERON BLOCK 542

APPENDIX A	<i>Contents of Plan</i>
APPENDIX B	<i>General Information</i>
APPENDIX C	<i>Geological, Geophysical & H₂S 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 Information Form and Well Information Form</i>

APPENDIX A CONTENTS OF PLAN

St. Mary Energy Company (SMEC) is the designated operator of the subject oil and gas lease.

(A) DESCRIPTION, OBJECTIVES AND SCHEDULE

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

(B) LOCATION

Included as *Attachment A-1* is a map showing the locations of proposed wells. Water depths are also indicated on the map. 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.

SMEC 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.

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

WC523

○ A SURF
○ B SURF
○ C SURF

PROPOSED LOCATIONS

LOCATION	CALLNS	CALLEW	X COORDINATE	Y COORDINATE	LATITUDE	LONGITUDE	WD	TVD	MD
A SURF	400.00' FNL	3,600.00' FWL	1,321,261.47'	-108,383.39'	28° 21' 05.315"N	93° 26' 34.235"W	185'		14,000'
B SURF	650.00' FNL	5,200.00' FWL	1,322,861.47'	-108,633.39'	28° 21' 03.132"N	93° 26' 16.286"W	185'		14,000'
C SURF	1,050.00' FNL	4,200.00' FWL	1,321,861.47'	-109,033.39'	28° 20' 58.992"N	93° 26' 27.390"W	185'		14,000'

WC543

WC542

OCS-G-22562

ST. MARY

WC541

GRID NORTH

WC547

**PUBLIC
INFORMATION**

DIGITAL COPY
ORIGINAL PLAT SIGNED 01/27/05

Printed: 1/27/05

**St. Mary
Energy**

EXPLORATION PLAN
OCS-G-22562
BLOCK 542
WEST CAMERON AREA
GULF OF MEXICO

FUGRO CHANCE INC.

220 Dallas Dr. Lafayette, Louisiana 70504-3001 (337) 237-1300



GEODETHIC DATUM: NAD27
PROJECTION: LOUISIANA SOUTH
GRID UNITS: US SURVEY FEET

SCALE
IN FEET 0 2,000'

Job No.: 05-0426 Date: 1/27/05 Drwn: TCG Chart: Of:

Dwgfile: O:\WellPermit\LA\WC\Permit\542ap

1 1

APPENDIX B GENERAL INFORMATION

(A) CONTACT

Inquiries may be made to the following authorized representative:

Cheryl Murphy / Carol Garcia
J. Connor Consulting, Inc.
16225 Park Ten Place, Suite 700
Houston, Texas 77084
(281) 578-3388
E-mail address: cheryl.murphy@jccteam.com

(B) PROSPECT NAME

Not applicable

(C) NEW OR UNUSUAL TECHNOLOGY

SMEC 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. 2000-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 West Cameron Block 542 located approximately 95 miles from the nearest shoreline and approximately 101 miles from the onshore support base in Cameron, 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	6
Supply Boat	4
Helicopter	10

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 22562 West Cameron Block 542.

1. Military Warning Area (MWA)

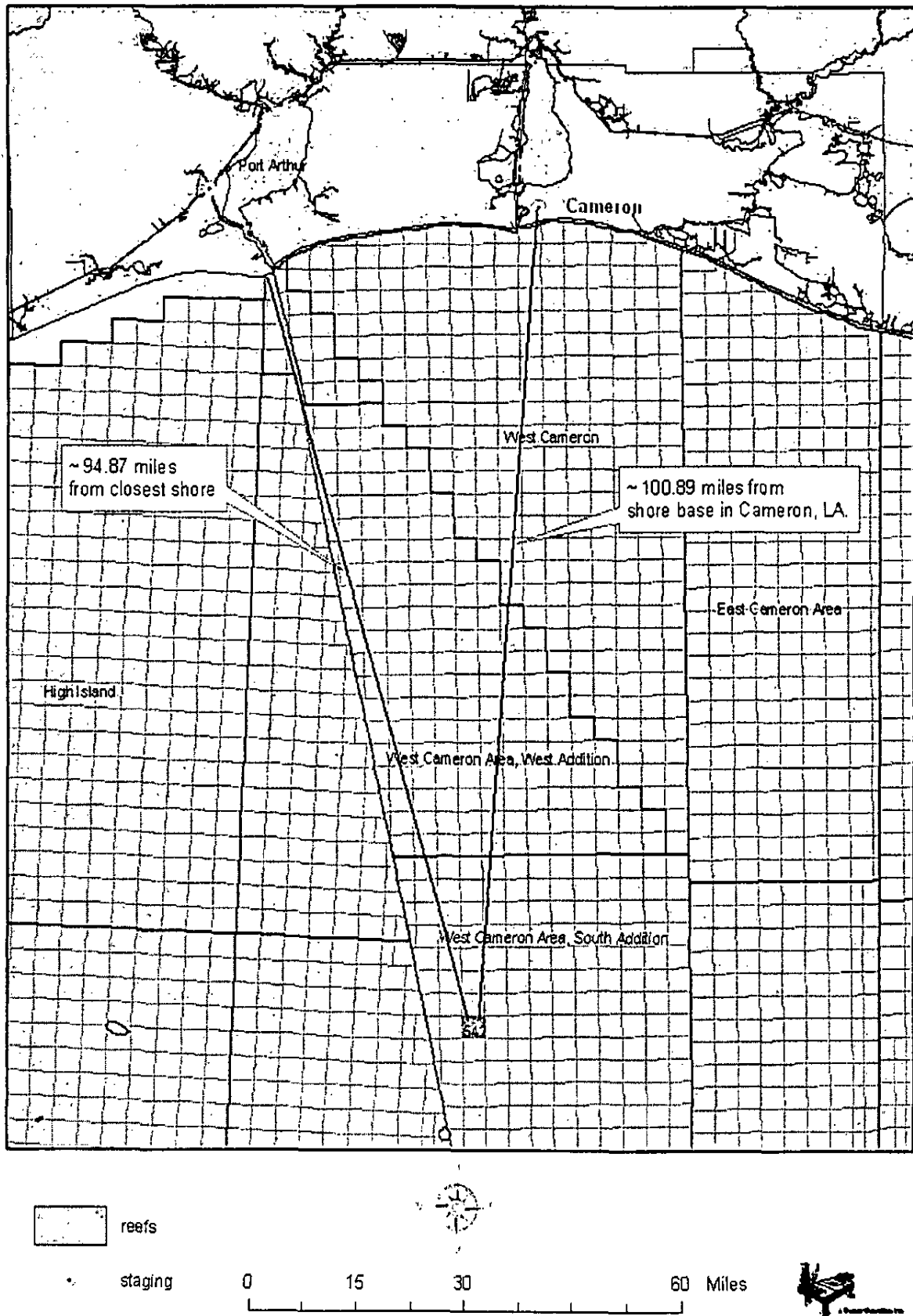
West Cameron Block 542 is located within designated MWA W-147AB. The 147th Fighter Wing in Houston, Texas will be contacted in order to coordinate and control the electromagnetic emissions during the proposed operations.

SPECIAL CONDITIONS

West Cameron Block 542 is located within the boundaries of the South Sabine Point lightering zone. SMEC will exercise caution while conducting the proposed activities within this area.

SMEC will operate in accordance with NTL No. 2003-G10, to minimize the risk of vessel strikes to protected species and report observations of injured or dead protected species, and NTL No. 2003-G11 to prevent intentional and/or accidental introduction of debris into the marine environment.

St. Mary Energy Company WC542



APPENDIX C

GEOLOGICAL, GEOPHYSICAL, AND H₂S INFORMATION

(A) STRUCTURE CONTOUR MAP

Proprietary data

(B) TRAPPING FEATURES

Proprietary data

(C) DEPTH OF GEOPRESSURE

Proprietary data

(D) INTERPRETED 3-D SEISMIC LINES

Proprietary data

(E) GEOLOGICAL STRUCTURE CROSS-SECTIONS

Proprietary data

(F) SHALLOW HAZARDS REPORT

A shallow hazards survey was conducted over West Cameron Block 542. 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 the proposed surface locations, 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

Proprietary data

(I) STRATIGRAPHIC COLUMN

Proprietary data

(J) TIME VS DEPTH TABLES

Proprietary data

(K) HYDROGEN SULFIDE INFORMATION

In accordance with Title 30 CFR 250. 490(c) and NTL No. 2003-G17, SMEC requests that West Cameron Block 542 be classified by the MMS as H₂S absent.

8.0 CONCLUSIONS AND RECOMMENDATIONS

The seafloor across the study area slopes gently from north to south with water depths ranging from 184 to 190 feet Mean Sea Level. Seafloor sediments in the survey area very likely consist of silty sands. Regional studies show that subbottom sediments in the survey area are firm at the seafloor to depths of 10 feet.

The subbottom profiler recorded zones of gas saturation buried 1 to 45 feet below the seafloor over the majority of the survey area.

Eight shallow subsurface faults were recorded within the bounds of the survey area.

Seven seismic amplitude anomalies that may indicate the presence of shallow high-pressure gas were detected on air gun records. These areas should be avoided as drilling locations. Existing exploration data in the vicinity of any potential well sites should be reviewed for the presence of shallow gas. Drilling logs of other wells in the vicinity may be helpful in identifying geologic zones that may be prone to shallow gas occurrences.

The infrastructure within the Block 542 consists of one caisson and two pipelines. The locations of the caisson, two pipelines, and unidentified magnetic anomalies should be taken into consideration during any future field development activities.

Seventeen unidentified magnetic anomalies are recorded in the study area. These are interpreted to be buried debris associated with boat traffic and/or prior construction activities.

No sonar contacts are recorded in the study area.

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

West Cameron Block 542 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 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).

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

WASTES

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

Disposal Table (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
Waste Oil	200 bbl/yr	0.5 bbl/day	Newpark Environmental Services, Cameron, LA	Pack waste oil and filters in drums and transport to waste facility onshore.
Trash and debris	1,000 ft ³	3 ft ³ /day	Newpark Environmental Services, Cameron, LA	Transport in storage bins on crew boat to landfill facility onshore.

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

APPENDIX F OIL SPILL INFORMATION

1. Site-Specific OSRP N/A

2. Regional OSRP Information

St. Mary Energy Company's Regional Oil Spill Response Plan (OSRP) was approved on December 2, 2003, and the most recent modification was approved on November 15, 2004. Activities proposed in this EP will be covered by the Regional OSRP.

3. OSRO Information

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

4. Worst-Case Scenario Comparison

Category	Regional OSRP WCD	EP WCD
Type of Activity	Exploratory Drilling	Exploratory Drilling
Facility Location (Area/Block)	MI 701	WC 542
Facility Designation		Wells A, B & C
Distance to Nearest Shoreline (miles)	30	95
Volume		
Storage tanks (total)		
Uncontrolled blowout	1200	1200
Total Volume	1200	1200
Type of Oil(s) (crude, condensate, diesel)	Condensate	Condensate
API Gravity	35°	50°

SMEC has determined that the worst-case scenario from the activities proposed in this EP does not supersede the worst-case scenario from our approved regional OSRP for ~~on-shore~~ ^{exploratory} activities.

Since SMEC has the capability to respond to the worst-case spill scenario included in our regional OSRP approved on December 2, 2003, and the most recent modification approved on November 15, 2004, 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 SMEC 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.

5. FACILITY TANKS, PRODUCTION FACILITIES

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	500	7	3500	32.4°
Production	N/A	N/A	N/A	N/A	N/A

APPENDIX G

AIR EMISSIONS INFORMATION

AIR EMISSIONS INFORMATION

Screen Procedures for EP'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
Are your proposed exploration activities located east of 87.5° W longitude?		X
Do you expect to encounter H ₂ 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.

Air Pollutant	Plan Emission Amounts ¹ (tons)	Calculated Exemption Amounts ² (tons)	Calculated Complex Total Emission Amounts ³ (tons)
Particular matter (PM)	28.22	3163.50	28.22
Sulphur dioxide (SO ₂)	129.47	3163.50	129.47
Nitrogen oxides (NO _x)	970.14	3163.50	970.14
Volatile organic compounds (VOC)	29.10	3163.50	29.10
Carbon Monoxide (CO)	211.67	70788.27	211.67

¹For activities proposed in your EP, list the projected emissions calculated from the worksheets.

²List the exemption amounts for your proposed activities calculated by using the formulas in 30 CFR 250.303(d).

³List the complex total emissions associated with your proposed activities calculated from the worksheets.

This information was calculated by: Carol Garcia
(281) 578-3388
carol.garcia@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)

St. Mary Energy Company (SMEC)

Initial Exploration Plan West Cameron Block 542 OCS-G 22562

(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 ₂ S 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		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)			(7)			
Prehistoric archaeological sites			(7)			
Vicinity of Offshore Location						
Essential fish habitat		X	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 West Cameron Block 542

Proposed operations consist of the drilling, completion, and testing of three new well locations. These operations will be completed using a jack-up rig.

1. Designated Topographic Features

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

Physical disturbances to the seafloor: West Cameron Block 542 is 8 miles from the closest designated Topographic Features Stipulation Block (Fathom Bank); therefore, no adverse impacts are expected.

Effluents: West Cameron Block 542 is 8 miles from the closest designated Topographic Features Stipulation Block (Fathom Bank); therefore, no adverse impacts are expected.

Accidents: It is unlikely that an accidental surface or subsurface spill would occur from the proposed activities (refer to statistics in **Item 5, Water Quality**). Oil spills cause damage to benthic organisms only if the oil contacts the organisms. Oil from a surface spill can be driven into the water column; measurable amounts have been documented down to a 10 m depth. At this depth, the oil is found only at concentrations several orders of magnitude lower than the amount shown to have an effect on corals. Because the crests of topographic features in the Northern Gulf of Mexico are found below 10 m, no oil from a surface spill could reach their sessile biota. Oil from a subsurface spill is not applicable due to the distance of these blocks from a topographic area. The activities proposed in this plan will be covered by SMEC'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: West Cameron Block 542 is 305 miles from the closest live bottom (pinnacle trend) area; therefore, no adverse impacts are expected.

Effluents: West Cameron Block 542 is 305 miles from the closest live bottom (pinnacle trend) area; therefore, no adverse impacts are expected.

Accidents: It is unlikely that an accidental surface or subsurface spill would occur from the proposed activities (refer to statistics in **Item 5, Water Quality**). Oil spills have the potential to foul benthic communities and cause lethal and sublethal effects on live bottom organisms. Oil from a surface spill can be driven into the water column; measurable amounts have been documented down to a 10 m depth. At this depth, the oil is found only at concentrations several 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 SMEC'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: West Cameron Block 542 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: West Cameron Block 542 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 SMEC'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 of 184 to 190 feet. High-density chemosynthetic communities are found only in water depths greater than 1,312 feet (400 meters); therefore, SMEC's proposed operations in West Cameron Block 542 would not cause impacts to chemosynthetic communities.

5. Water Quality

IPFs that could result in water quality degradation from the proposed operations in West Cameron Block 542 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 SMEC'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 West Cameron Block 542 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 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 SMEC'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 West Cameron Block 542 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).

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

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

Accidents: Collisions between support vessels and cetaceans would be unusual events, however should one occur, death or injury to marine mammals is possible. Contract vessel operators can avoid marine mammals and reduce potential deaths by maintaining a vigilant watch for marine mammals and maintaining a safe distance when they are sighted. Vessel crews should use a reference guide to help identify the twenty-eight species of whales and dolphins, and the single species of manatee that may be encountered in the Gulf of Mexico OCS. Vessel crews must report sightings of any injured or dead protected marine mammal species immediately, regardless of whether the injury or death is caused by their vessel, to the Marine Mammal and Sea Turtle Stranding Hotline at (800) 799-6637, or the Marine Mammal Stranding Network at

(305) 862-2850. In addition, if the injury or death was caused by a collision with a contract vessel, the MMS must be notified within 24 hours of the strike by email to protectedspecies@mms.gov. If the vessel is the responsible party, it is required to remain available to assist the respective salvage and stranding network as needed.

Oil spills have the potential to cause sublethal oil-related injuries and spill-related deaths to marine mammals. However, it is unlikely that an accidental oil spill would occur from the proposed activities (refer to **Item 5, Water Quality**). Oil spill response activities may increase vessel traffic in the area, which could add to changes in cetacean behavior and/or distribution, thereby causing additional stress to the animals. The effect of oil dispersants on cetaceans is not known. The acute toxicity of oil dispersant chemicals included in SMEC'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 SMEC'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; Lohoefer 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). SMEC will operate in accordance with the regulations and also avoid accidental loss of

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

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

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

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

The projected air emissions identified in Appendix G are not expected to affect the OCS air quality primarily due to distance to the shore or to any Prevention of Significant Deterioration Class I air quality area such as the Breton Wilderness Area. West Cameron Block 542 is beyond the 200 kilometer (124 mile) buffer for the Breton Wilderness Area and is 95 miles from the

coastline. Therefore, no special mitigation, monitoring, or reporting requirements apply with respect to air emissions.

Accidents and blowouts can release hydrocarbons or chemicals, which could cause the emission of air pollutants. However, these releases would not impact onshore air quality because of the prevailing atmospheric conditions, emission height, emission rates, and the distance of West Cameron Block 542 from the coastline. There are no other IPFs (including effluents, physical disturbances to the seafloor, wastes sent to shore for treatment or disposal) from the proposed activities which could impact air quality.

10. Shipwreck Sites (known or potential)

IPFs that could impact known or unknown shipwreck sites as a result of the proposed operations in West Cameron Block 542 include disturbances to the seafloor. West Cameron Block 542 is not located in or adjacent to an OCS block designated by MMS as having a high probability for occurrence of shipwrecks. SMEC 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 which could impact prehistoric archaeological sites as a result of the proposed operations in West Cameron Block 542 include disturbances to the seafloor (structure emplacement) and accidents (oil spill). West Cameron Block 542 is located outside the Archaeological Prehistoric high probability line. SMEC 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 SMEC'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 which could impact 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 West Cameron Block 542 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 SMEC'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 SMEC'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). SMEC will operate in accordance with the regulations and also avoid accidental loss of solid waste items by maintaining waste management plans, manifesting trash sent to shore, and using special precautions such as covering outside trash bins to prevent accidental loss of solid waste. Special caution will be exercised when handling and disposing of small items and packaging materials, particularly those made of non-biodegradable, environmentally persistent materials such as plastic or glass. Informational placards will be posted on all vessels and facilities having sleeping or food preparation capabilities. All offshore personnel, including contractors and other support services-related personnel (e.g. helicopter pilots, vessel captains and boat crews) will be indoctrinated on waste procedures, and will view the video (or Microsoft PowerPoint presentation), "All Washed Up: The Beach Litter Problem". Thereafter, all personnel will view the marine trash and debris training video annually. Debris, if any, from these proposed activities will seldom interact with marine and pelagic birds; therefore, the effects will be negligible.

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

3. Public Health and Safety Due to Accidents.

There are no IPFs (emissions, effluents, physical disturbances to the seafloor, wastes sent to shore for treatment or disposal or accidents, including an accidental H₂S releases) from the proposed activities which could cause impacts to public health and safety. In accordance with NTL No. 2003 G-17, sufficient information is included in **Appendix C** to justify our request that our proposed activities be classified by MMS as H₂S 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 distance from shore (95 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 SMEC'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). SMEC will operate in accordance with the regulations and also avoid accidental loss of solid waste items by maintaining waste management plans, manifesting trash sent to shore, and using special precautions such as covering outside trash bins to prevent accidental loss of solid waste. Special caution will be exercised when handling and disposing of small items and packaging materials, particularly those made of non-biodegradable, environmentally persistent materials such as plastic or glass.

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

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

2. Wetlands

Accidents: Oil spills could cause impacts to wetlands, 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 (95 miles) and the response capabilities that would be implemented, no impacts are expected. The activities proposed in this plan will be covered by SMEC'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 which could impact wetlands.

3. Shore Birds and Coastal Nesting Birds

Accidents: Oil spills could cause impacts to shore birds and coastal nesting birds. However, it is unlikely that an oil spill would occur from the proposed activities (refer to **Item 5, Water Quality**). Given the distance from shore (95 miles) and the response capabilities that would be implemented, no impacts are expected. The activities proposed in this plan will be covered by SMEC's 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). SMEC will operate in accordance with the regulations and also avoid accidental loss of solid waste items by maintaining waste management plans, manifesting trash sent to shore, and using special precautions such as covering outside trash bins to prevent accidental loss of solid waste. Special caution will be exercised when handling and disposing of small items and packaging materials, particularly those made of non-biodegradable, environmentally persistent materials such as plastic or glass.

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

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

Accidents: An accidental oil spill from the proposed activities could cause impacts to coastal wildlife refuges. 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 (95 miles) and the response capabilities that would be implemented, no impacts are expected. The activities proposed in this plan will be covered by SMEC'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 (270 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 SMEC'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:

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Vermeer, K. and R. Vermeer, 1975 Oil threat to birds on the Canadian west coast. *The Canadian Field-Naturalist*. 89:278-298.

Although not cited, the following were utilized in preparing this ELA:

- 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

Relevant enforceable policies were considered in certifying consistency for Louisiana. 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

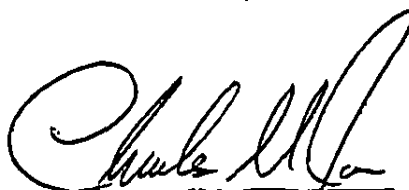
WEST CAMERON BLOCK 542

OCS-G 22562

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).

St. Mary Energy Company

Lessee or Operator



Certifying Official

BEST AVAILABLE COPY

1-27-05

Date

PLAN INFORMATION FORM

GENERAL INFORMATION									
Type of OCS Plan:		X		Exploration Plan (EP)		Development Operations Coordination Document (DOCD)			
Company Name:		St. Mary Energy Company				MMS Operator Number: 02246			
Address:		580 Westlake Park Blvd. Suite 600		Houston, TX 77079		Contact Person: Cheryl Murphy / Carol Garcia J. Connor Consulting, Inc. Phone Number: 281-578-3388 Email Address: cheryl.murphy@jccteam.com			
Lease: OCS- G 22562		Area: WC		Block: 542		Project Name (If Applicable): N/A			
Objective(s):		<input checked="" type="checkbox"/> Oil		<input checked="" type="checkbox"/> Gas		<input type="checkbox"/> Sulphur		<input type="checkbox"/> Salt	
		Onshore Base:		Cameron, Louisiana		Distance to Closest Land (Miles): 95			
Description of Proposed Activities (Mark all that apply)									
<input checked="" type="checkbox"/> Exploration drilling					<input type="checkbox"/> Development drilling				
<input 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 checked="" 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?								Yes	X No
Tentative Schedule of Proposed Activities									
Proposed Activity						Start Date	End Date	No. of Days	
Drill and temporarily abandon well location A						4/1/05	6/1/05	62	
Drill and temporarily abandon well location B						6/2/05	8/2/05	62	
Drill and temporarily abandon well location C						8/3/05	10/3/05	62	
Description of Drilling Rig					Description of Production Platform				
<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)		
Description of Lease Term Pipelines									
From (Facility/Area/Block)		T0 (Facility/Area/Block)		Diameter (inches)		Length (Feet)		Product	

Proposed Well/Structure Location

Well or Structure Name/Number: Well location A		Subsea Completion		<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Anchor Radius (if applicable) in feet: N/A					
	Surface Location	Bottom-Hole Location (For Wells)			
Lease No.	G 22562				
Area Name	West Cameron				
Block No.	542				
Blockline Departures (in feet)	N/S Departure: 400' FNL	N/S Departure:			
	E/W Departure: 3600' FWL	E/W Departure:			
Lambert X-Y coordinates	X=1,321,261.47				
	Y=-108,383.39				
Latitude/ Longitude	Latitude: 28° 21' 05.315"	Latitude:			
	Longitude: 93° 26' 34.235"	Longitude:			
	TVD (Feet):		MD (Feet):		Water Depth (Feet): 185

Proposed Well/Structure Location

Well or Structure Name/Number: Well location B		Subsea Completion		<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Anchor Radius (if applicable) in feet: N/A					
	Surface Location	Bottom-Hole Location (For Wells)			
Lease No.	G 22562				
Area Name	West Cameron				
Block No.	542				
Blockline Departures (in feet)	N/S Departure: 650' FNL	N/S Departure:			
	E/W Departure: 5200' FWL	E/W Departure:			
Lambert X-Y coordinates	X=1,322,861.47				
	Y=-108,633.39				
Latitude/ Longitude	Latitude: 28° 21' 03.132"	Latitude:			
	Longitude: 93° 26' 16.286"	Longitude:			
	TVD (Feet):		MD (Feet):		Water Depth (Feet): 185

Proposed Well/Structure Location

Well or Structure Name/Number:		Well location C		Subsea Completion		<input type="checkbox"/> Yes		<input checked="" type="checkbox"/> No					
Anchor Radius (if applicable) in feet:				N/A									
		Surface Location			Bottom-Hole Location (For Wells)								
Lease No.		G 22562											
Area Name		West Cameron											
Block No.		542											
Blockline Departures (in feet)		N/S Departure: 1050' FNL			N/S Departure:								
		E/W Departure: 4200' FWL			E/W Departure:								
Lambert X-Y coordinates		X=1,321,861.47											
		Y=-109,033.39											
Latitude/ Longitude		Latitude: 28° 20' 58.992"			Latitude:								
		Longitude: 93° 26' 27.390"			Longitude:								
		TVD (Feet):				MD (Feet):				Water Depth (Feet):		185	