

UNITED STATES GOVERNMENT  
MEMORANDUM

June 6, 2005

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

Subject: Public Information copy of plan  
Control # - N-08445  
Type - Initial Exploration Plan  
Lease(s) - OCS-G22163 Block - 783 Mustang Island Area  
Operator - Spinnaker Exploration Company, L.L.C.  
Description - Wells A and B  
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.

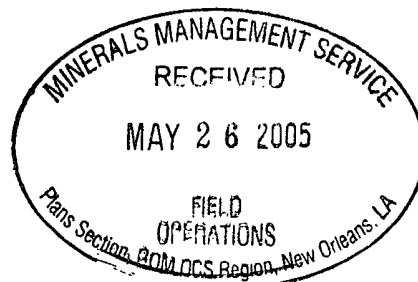


Elmo Cooper  
Plan Coordinator

| Site Type/Name | Botm Lse/Area/Blk | Surface Location  | Surf Lse/Area/Blk |
|----------------|-------------------|-------------------|-------------------|
| WELL/A         | G22163/MU/783     | 500 FNL, 330 FEL  | G22163/MU/783     |
| WELL/B         | G22163/MU/783     | 2500 FNL, 100 FEL | G22163/MU/783     |

155 JUN 7 05PM 2:18

NOTED - SCHEXNAILDRE



May 24, 2005

Minerals Management Service  
Gulf of Mexico - OCS Region  
1201 Elmwood Park Boulevard  
New Orleans, LA 70123-2394

Attention: Mr. Don Howard, MS 5200

Re: Mustang Island Block 783  
OCS-G 22163  
Offshore, Texas  
**Initial Exploration Plan**

CONTROL No. N-8445  
REVIEWER: Elmo Cooper  
PHONE: (504) 731-7810

Gentlemen:

In accordance with the guidelines set forth in 30-CFR 250.203, Spinnaker Exploration Company, L.L.C. (Spinnaker) is submitting for your favorable review and approval a proposed Initial Exploration Plan (EP) for Mustang Island Block 783.

Enclosed you will find nine (9) copies of the subject plan; five (5) of which contain "Proprietary Data" that are exempt from disclosure under the privacy Act (5 U.S.C. 552a) and the implementing regulations (43 CFR Part 2 Subpart D). Four (4) copies are considered "Public Information."

Drilling operations are expected to commence on or before **July 15, 2005**.

Our \$3,000,000 Area wide Development Bond number is RLB-0001151 and our \$300,000 OCS Right-Of-Way Grant Bond number is B-7748. Spinnaker Exploration Company, L.L.C. acquired these bonds June 25, 1999 and September 25, 1998, respectively.

Review and approval of our EP at your earliest convenience is greatly appreciated.

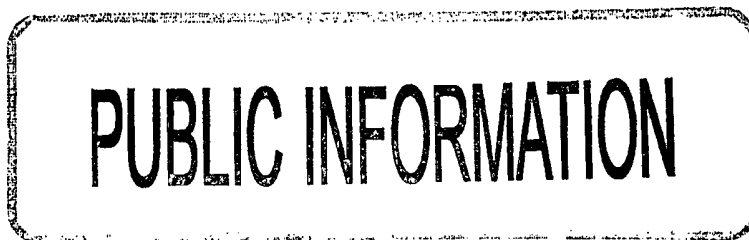
Should you require any additional information, please feel free to contact me at 713/356-7534.

Sincerely,

Spinnaker Exploration Company, L.L.C.

Thomas G. Becnel  
Regulatory Affairs Manager

enclosures



Spinnaker Exploration Company, L.L.C.

MU783\EP\Cv\12006 Smith Street, Suite 800 • Houston, Texas 77002 • tel 713.759.1770 • fax 713.759.1773

**SPINNAKER EXPLORATION COMPANY, L.L.C.**

**INITIAL EXPLORATION PLAN  
LEASE OCS-G 22163  
MUSTANG ISLAND BLOCK 783**

|           |   |
|-----------|---|
| SECTION A | Contents of Plan                            |
| SECTION B | General Information                         |
| SECTION C | Geological, Geophysical & H2S Information   |
| SECTION D | Biological and Physical Information         |
| SECTION E | Wastes and Discharge Information            |
| SECTION F | Oil Spill Response and Chemical Information |
| SECTION G | Air Emissions Information                   |
| SECTION H | Environmental Impact Analysis               |
| SECTION I | CZM Consistency                             |
| SECTION J | OCS Plan Information Form                   |

## SECTION A

### CONTENTS OF PLAN

#### LEASE DESCRIPTION/ACTIVITY

Lease OCS-G **22163** was acquired by Spinnaker at the Western Gulf of Mexico Lease Sale **177** on **August 2000**. The subject lease was issued with an effective date of **November 1, 2000**, and primary term ending date of **October 31, 2005**.

Spinnaker is the designated operator of the subject oil and gas lease.

#### OBJECTIVE

This Initial Exploration Plan provides for the drilling and suspension two (2) exploratory wells in **Mustang Island Block 783** to test the target sand(s) as detailed in **Section C** of this plan. Install a net guard and buoy with a dive boat at each well location.

#### SCHEDULE

The following schedule details the proposed drilling and suspension of the wells provided for in this plan:

| Activity  | Estimated Start Date | Estimated Completion Date |
|---|----------------------|---------------------------|
| Drill & MLA Well A & Install a Net Guard & Buoy | 07-15-05             | 08-28-05                  |
| Drill & MLA Well B & Install a Net Guard & Buoy | 08-29-05             | 10-12-05                  |
|   |                      |                           |
|   |                      |                           |
|   |                      |                           |

This schedule is tentative in the meaning of Title 30 CFR 250.203-1. Additional exploratory drilling must be predicated upon the need to further define the structures and/or reservoir limitations.

#### WELL LOCATIONS

The approximate location of the subject wells in this Initial Exploration Plan is shown on the table and plat included in **Section J** of this Plan.

## DESCRIPTION OF DRILLING UNIT

Offshore exploratory activities are carried out from mobile drilling rigs. The five most common types of mobile rigs employed for exploratory drilling offshore are submersible drilling rig, semi-submersible drilling rigs, jack-up drilling rig, drill ships, and drill barges.

The proposed well will be drilled and completed with a typical jack-up rig. Rig specifications will be made a part of the appropriate Applications for Permit to Drill. **(Spinnaker will not be using a Gorilla Class rig.)**

Safety features on the MODU will include well control, pollution prevention, welding procedures, and blowout prevention equipment as described in Title 30 CFR Part 250, Subparts C, D, E, G and O; and as invoked by the MMS, Environmental Protection Agency and the U.S. Coast Guard. The appropriate life rafts, life jackets, ring buoys, etc., as prescribed by the U.S. Coast guard, will be maintained on the facility at all times.

In accordance with Title 30 CFR Part 250, Subpart O, an operator is to ensure that Well Control Training is provided for lessee and contractor personnel engaged in oil and gas operations in the OCS Gulf of Mexico.

Supervisory and certain designated personnel on-board the facility will be familiar with the effluent limitations and guidelines for overboard discharges into the receiving waters, as outlined in the NPDES General Permit GMG290000.

The operator is charged with the responsibility to not create conditions that will pose unreasonable risk to the public health, life, property, aquatic life, wildlife, recreation, navigation, commercial fishing, or other uses of the ocean. Some of these measures include installation of curbs, gutters, drip pans, and drains on drilling deck areas to collect all contaminants and debris.

The MMS is required to conduct onsite inspections of offshore facilities to confirm operators are complying with lease stipulations, operating regulations, approved plans, and other conditions as well as to assure safety and pollution prevention requirements are being met. The National Potential Incident of Noncompliance (PINC) List serves as the baseline for these inspections. The MMS also inspects the stockpiles of equipment listed in the operator's approved Oil Spill Response Plan that would be used for the containment and cleanup of hydrocarbon spills.

## DESCRIPTION OF STRUCTURES

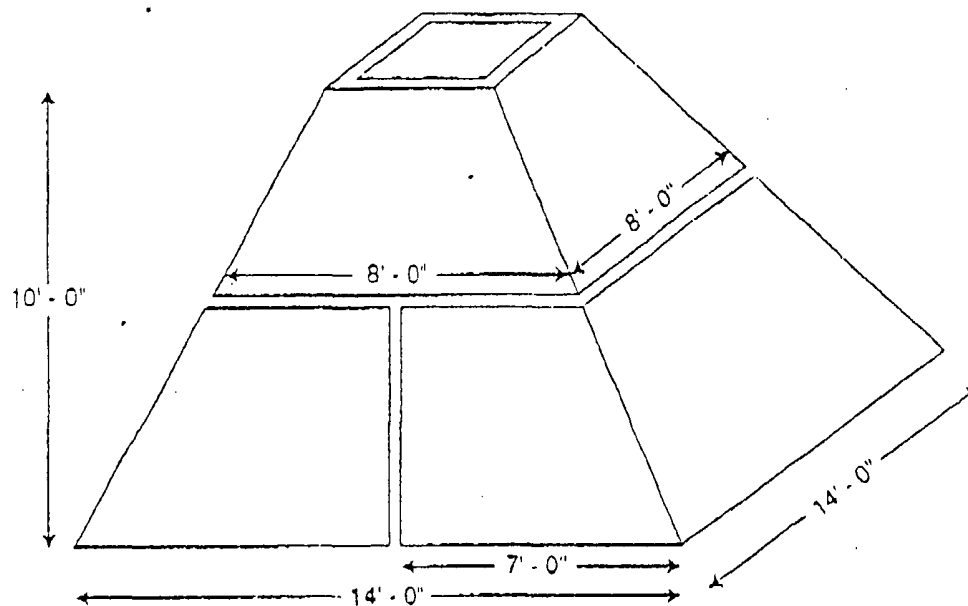
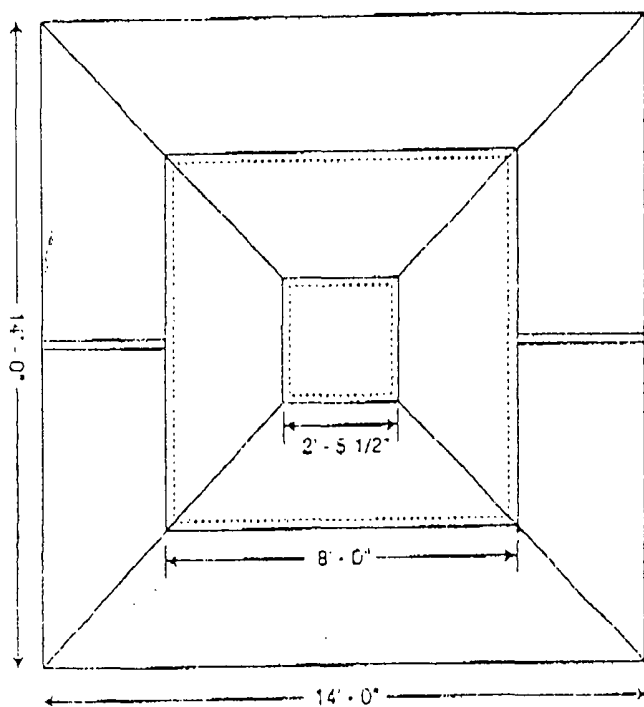
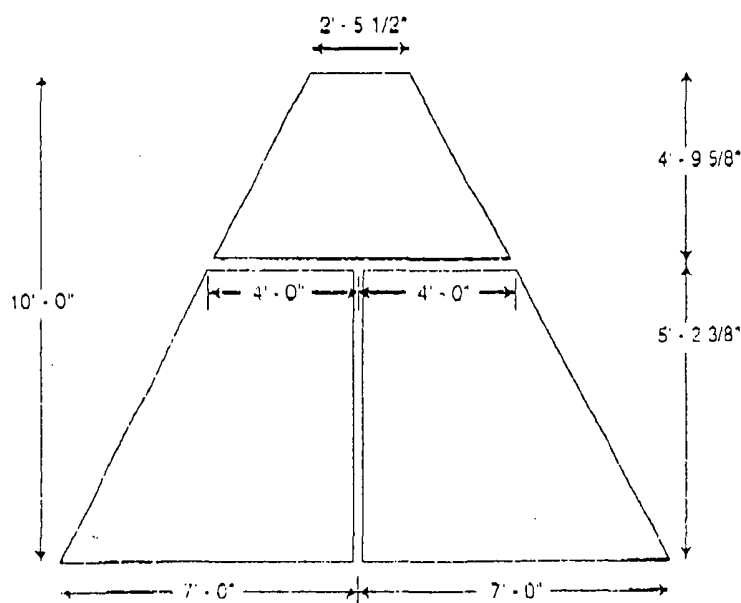
## DESCRIPTION OF VESSELS

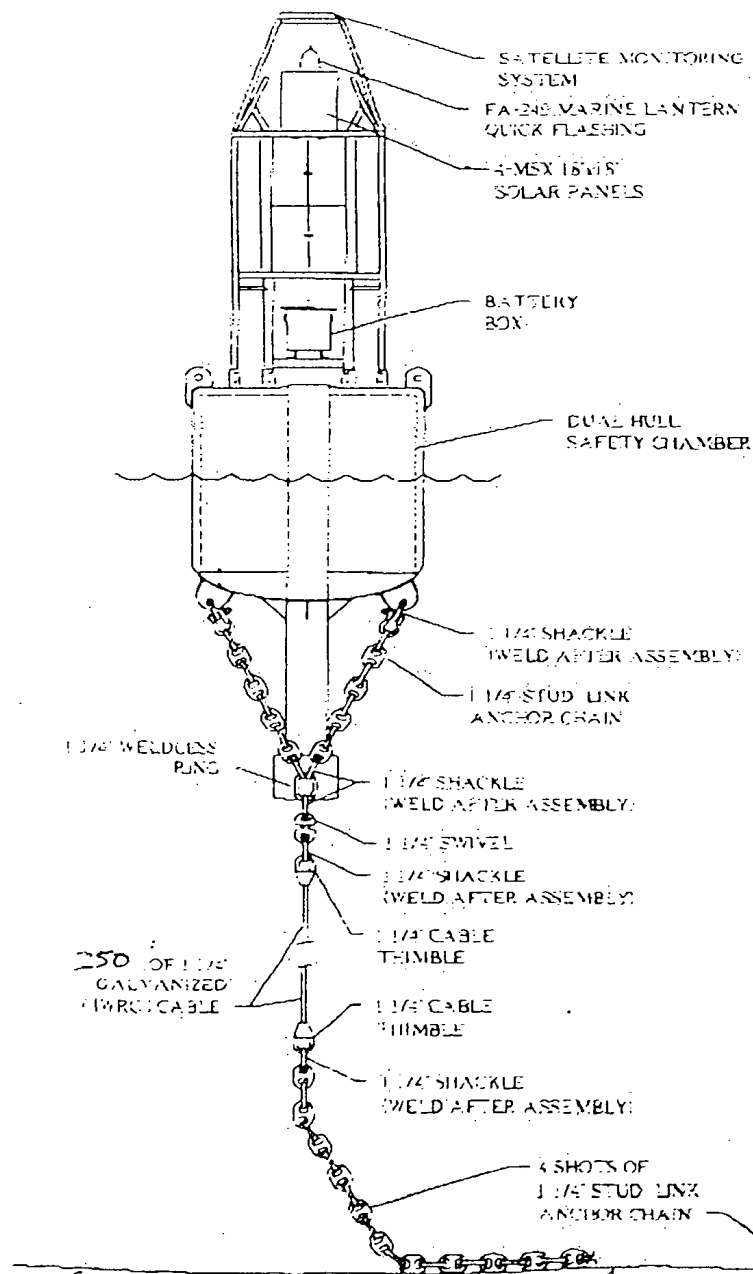
**Diesel fuel – API gravity - 32°**

# PUBLIC INFORMATION

**EFFECTIVE • ECONOMICAL • STURDY****Dimensions****(Assembled):**• **Netguard**

14' x 14' x 10' High

• **Mini-Netguard**8' x 8' x 5' High (No  
assembly required)**HTK SUBSEA NETGUARD****ISOMETRIC VIEW****TOP VIEW****SIDE VIEW***Attachment A-1*



**"SMART LOUIE BUOY"**  
**U.S.C.G. APPROVED**  
**LIGHTED NAVIGATIONAL AID BUOY**

FOR ILLUSTRATION ONLY - NOT TO SCALE

| Superior<br>Offshore Services, Inc. |   |
|-------------------------------------|---|
| MODIFICATION                        | MODIFICATION ARRANGEMENT FOR<br>MODIFIED 520 # 2 BUOY |
| DESCRIPTION                         | "SMART LOUIE BUOY"                                    |
| DATE                                | 2/28/77   |
| BY                                  | Superior  |
| CHECKED                             | Superior  |
| APPROVED                            | Superior  |

Attachment A-2



## SECTION B

### GENERAL

#### CONTACT

Inquiries may be made to the following authorized representative:

Thomas G. Becnel  
Spinnaker Exploration Company, L.L.C.  
1200 Smith Street, Suite 800  
Houston, Texas 77002  
713/356-7534  
[tbecnel@spinexp.com](mailto:tbecnel@spinexp.com)

#### PROSPECT NAME

Fawn Creek

#### NEW OR UNUSUAL TECHNOLOGY

Spinnaker does not propose utilizing any new or unusual technology during the proposed drilling and suspension operations.

#### BONDING

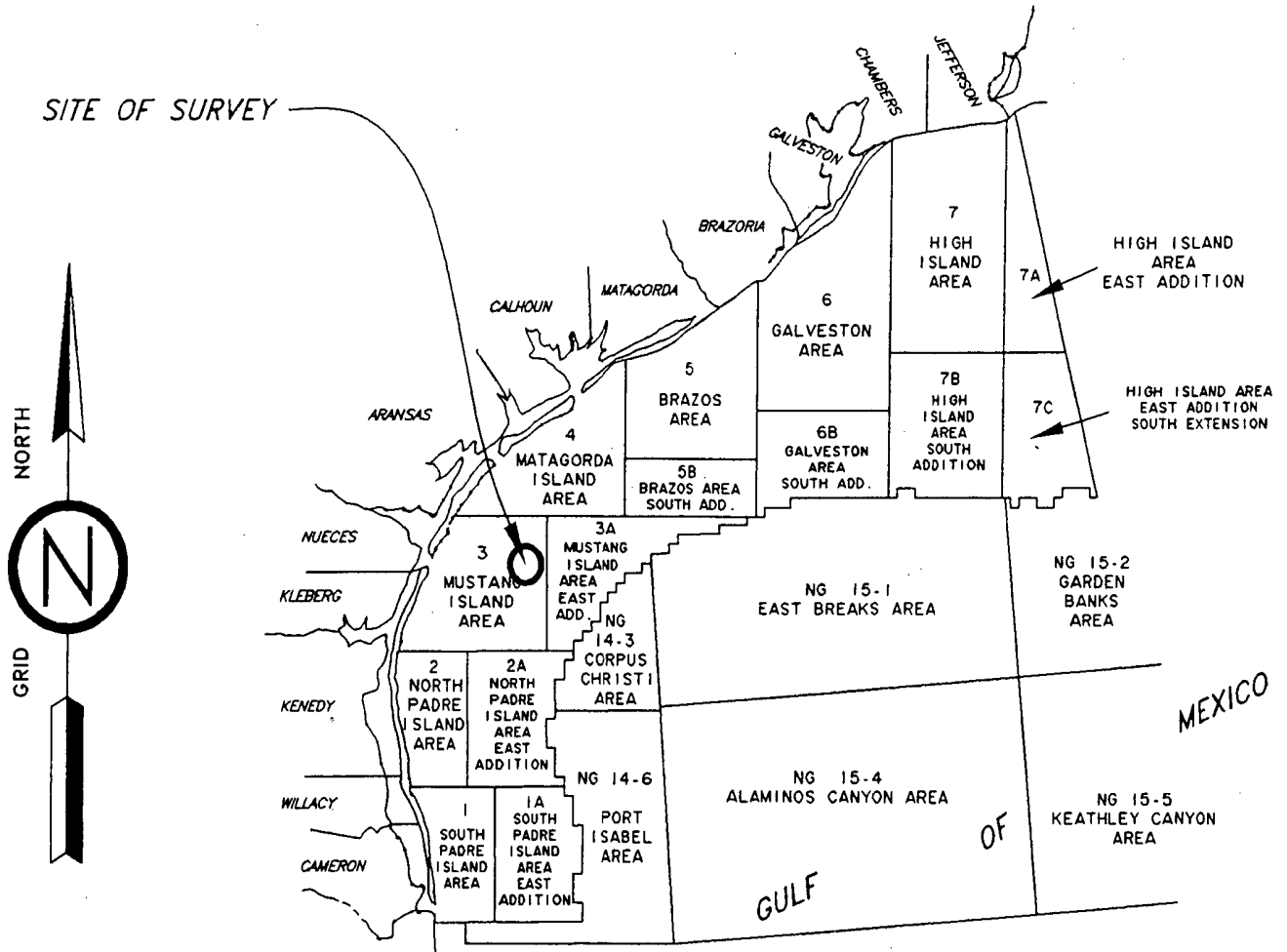
In accordance with Notice to Lessees (NTL) 99-G04 which implements the requirements for general lease surety bonds contained in 30 CRR 256, Subpart I, Spinnaker has a \$3,000,000 Area Wide Development Bond on file with the Minerals Management Service.

Additionally, NTL 98-18N addresses how MMS has the authority to require additional security to cover full plugging, site clearance and other associated lease liabilities which may be in excess of the general lease surety bonds. These activities are reviewed on a case-by-case basis, and if deemed warranted, Minerals Management Service will provide such notification to Spinnaker.

#### ONSHORE SUPPORT BASE

**Mustang Island Block 783** is located approximately **29.9** miles from the nearest Texas shoreline and approximately **29.9** miles from the onshore support base located in **Harbor Island, Texas**. A Vicinity Plat showing the location of **Mustang Island Block 783** relative to the shoreline and onshore base is included as **Attachment B-1**.

TEXAS GULF COAST INDEX  
M.M.S. O.C.S. LEASING AREAS



INSTRUMENTATION:

DIFFERENTIAL GPS NAVIGATION SYSTEM  
24/208 kHz ECHO SOUNDER  
SIDE SCAN SONAR (SMS 260)  
MAGNETOMETER  
3.5 kHz SUBBOTTOM PROFILER  
HIGH RESOLUTION SEISMIC SYSTEM;  
100 CU. IN. AIR GUN

VICINITY MAP

*29.9 miles to  
Harbor Island  
Nearest Shoreline*

*Attachment B-1*

GENERAL NOTES:

X, Y COORDINATES, IN FEET, AND BEARINGS ARE BASED ON THE TEXAS STATE PLANE COORDINATE SYSTEM (LAMBERT), SOUTH ZONE (NAD 27) CLARKE 1866.

SURVEY PERFORMED BY K C OFFSHORE IN OCTOBER, 1993.

|  |           |          |                 |   |        |
|--|-----------|----------|-----------------|---|--------|
| UPDATED ARCHAEOLOGICAL &<br>HAZARD REPORT<br><br>SURVEY LOCATION MAP<br><br>BLOCK 783<br>MUSTANG ISLAND AREA<br><br>OFFSHORE TEXAS |           |          |                 | SPINNAKER EXPLORATION<br>COMPANY, L.L.C.<br><br>Thales GeoSolutions, Inc.<br>36499 Perkins Rd.<br>Prairieville, Louisiana 70769<br>Tel: 225-673-5881 Fax: 225-673-5877<br><b>THALES</b> |        |
| DRN. ELA   | PREP. ELA | CAL. TAO | APP. JAG        | FILE NO. 02-1073-01B  |        |
| CHK. 352   | CHK. 352  | CHK. 352 | DATE: 3-18-2002 | FIG. NO. 1  | PAGE 2 |

Spinnaker will utilize onshore facilities located in **Harbor Island, Texas**, which will serve as a port of debarkation for supplies and crews. No onshore expansion or construction is anticipated with respect to the proposed activities.

This base is capable of providing the services necessary for the proposed activities. It has 24-hour service, a radio tower with a phone patch, dock space, equipment, and supply storage base, drinking and drill water, etc. This base will also serve as a loading point for tools, equipment and machinery to be delivered to the MODU, crew change and transportation base, and temporary storage for materials and equipment. These facilities typically include outdoor storage, forklift and crane service, dock, trailer facilities and parking, as well as 24-hour service.

Support vessels and travel frequency during drilling and completion activities are as follows:

| <b>Support Vessel<br/>&amp; Aircraft</b> | <b>Drilling &amp; TA Operations<br/>Trips Per Week</b> |
|--|--|
| Crew Boat                                | 5  |
| Supply Boat                              | 3  |
| Helicopter                               | 1  |

Personal vehicles will be the main means of transportation to carry rig personnel from various locations to the staging areas. They will then be transported to the MODU by the crew boat. A helicopter will be used to transport small supplies and, on occasion, personnel in emergency situations. The most practical, direct route permitted by the weather and traffic conditions will be utilized.

#### **NEW ONSHORE CONSTRUCTION OR EXPANSION OF SUPPORT FACILITIES**

The proposed operations do not mandate any immediate measures for land acquisition or expansion of the existing onshore base facilities.

Dredging and filling operations will not be required for the operations, nor will any new construction or expansion of onshore facilities be involved for the operations proposed in this Initial Exploration Plan.

## **LEASE STIPULATIONS**

Oil and gas exploration activities on the OCS are subject to stipulations developed before the lease sale; these are attached to the lease instrument, as necessary, in the form of mitigating measures. The MMS is responsible for ensuring full compliance with lease stipulations.

**Stipulation No.2 - Spinnaker will file a notification with the Military Warning Area W-228 in Corpus Christi, TX with regard to vessel and aircraft traffic in MWA W-228 prior to conducting operations on Mustang Island Block 783. Attachment B-2.**



May 24, 2005

**Certified Mail**  
**Return Receipt Requested**

Chief, Naval Air Training  
Attn: Code N332 (ATC & Space Mgt)  
Naval Air station  
Corpus Christi, Texas 78419-5100

Attention: **W-228**  
**Staff Sergeant Gina Turner**  
**Master Sergeant Kane**

Re: **Mustang Island Area**  
**Block 783, OCS-G 22163**  
**Initial Exploration Plan**

Ladies/Gentlemen:

In accordance with the guidelines set forth in Stipulation 2 (c) of the lease agreement for **Mustang Island Block 781**, Spinnaker is notifying you of our estimated vessel and aircraft traffic proposed in the above referenced Exploration Plan. The proposed frequency and mode of travel is given in the table below:

| Support Vessel<br>& Aircraft | Drilling Operations<br>Trips Per Week |
|------------------------------|---------------------------------------|
| Crew Boat                    | 5                                     |
| Supply Boat                  | 3                                     |
| Helicopter                   | 1                                     |

Enclosed are the well location(s) where the proposed activity will take place.

Drilling operations are expected to commence on or about **July 15, 2005**.

Should you require any additional information, please feel free to contact me at 713/356-7534.

Sincerely,

Spinnaker Exploration Company, L.L.C.

Thomas G. Becnel  
Regulatory Affairs Manager

enclosures

|                                       |                         |
|---------------------------------------|-------------------------|
|                                       | <b>Surface Location</b> |
| <b>Lease/Well</b>                     | OCS G 22163 No.1 (A)    |
| <b>Area Name</b>                      | Mustang Island          |
| <b>Block No.</b>                      | 783                     |
| <b>Blockline Departures (in feet)</b> | N/S Departure: 500 FNL  |
|                                       | EW Departure: 330 FEL   |
| <b>Lambert X-Y coordinates</b>        | X: 2,616,845.32         |
|                                       | Y: 729,049.75           |
| <b>Latitude/ Longitude</b>            | Latitude: 27-39-34.533  |
|                                       | Longitude: 96-35-39.777 |

|                                       |                         |
|---------------------------------------|-------------------------|
|                                       | <b>Surface Location</b> |
| <b>Lease/Well</b>                     | OCS G 22163, (B)        |
| <b>Area Name</b>                      | Mustang Island          |
| <b>Block No.</b>                      | 783                     |
| <b>Blockline Departures (in feet)</b> | N/S Departure: 2500 FNL |
|                                       | EW Departure: 100 FEL   |
| <b>Lambert X-Y coordinates</b>        | X: 2,617,075.32         |
|                                       | Y: 727,049.75           |
| <b>Latitude/ Longitude</b>            | Latitude: 27-39-14.695  |
|                                       | Longitude: 96-35-37.555 |

## SECTION C G & G INFORMATION

### STRUCTURE CONTOUR MAPS

Current structure maps drawn to the top of the prospective hydrocarbon accumulations showing the surface and bottom hole locations of wells 'A' and 'B' are included in this section as **Attachments C-1, C-2 and C-3**.

### INTERPRETED SEISMIC LINES

Included as **Attachment C-4** is a copy of the letter being submitted under separate cover this date depicting the migrated and annotated deep seismic lines within 500 feet of the surface locations being proposed in this plan.

### GEOLOGICAL STRUCTURE CROSS SECTION

Interpreted geological cross section depicting the proposed well locations and the geologic name and age of the anticipated structures is included as **Attachment C-5 and C-6**. This cross section corresponds to each seismic line being submitted under separate cover.

### SHALLOW HAZARDS REPORT

An evaluation of the potential shallow hazards and an assessment of possible cultural resources in the referenced block were conducted by KC Offshore during **October 1993**. Enclosed is a copy of your letter dated February 7, 2002 approving the use of the data obtained from this survey.

Our review of the high resolution geophysical survey data and archaeological assessment prepared by Thales Geosolutions, Inc. in March of 2002 and Tesla Offshore, LLC in May 2005 indicates that there are no hazards near surface locations A or B.

The purpose of the survey was to prepare an archaeological assessment and hazard study across **Mustang Island Block 783** to evaluate the geologic conditions and inspect for potential hazards or constraints to lease exploration and development.

Three (3) copies of the shallow hazards report, with the updated anomaly map and archaeological analysis, are being submitted under separate cover to the Minerals Management Service to clear the locations proposed under our initial EP for **Mustang Island Block 783** (Lease OCS-G **22163**) 'A' and 'B' locations. The purpose of the analysis is to evaluate the geologic conditions and inspect for potential hazards or constraints to lease development.

### SHALLOW HAZARDS ANALYSIS

A shallow hazards analysis has been prepared for the proposed surface location, evaluating seafloor and subsurface geologic and manmade features and conditions, and is included as **Attachment C-9**.

## HIGH RESOLUTION SEISMIC LINES

Included as **Attachment C-4** is a copy of the letter being submitted under separate cover this date depicting the annotated shallow hazards lines within 500 feet of the surface locations being proposed in this Plan.

## STRATIGRAPHIC COLUMN

A generalized biostratigraphic/lithostratigraphic column from the seafloor to the total depth of the proposed well is included as **Attachment C-7**.

## TIME VERSUS DEPTH TABLE(S)

Included as **Attachment C-8** are the appropriate tables providing seismic time versus depth for the proposed well location in areas where there is no well control.

## DESCRIPTION OF HYDROCARBON TRAPPING ELEMENTS (Proprietary Data)

## ESTIMATED DEPTH OF GEOPRESSURE

The depth of geopressure is estimated to be approximately 9,600' TVD based on offset well control around proposed Location "A" and Location "B". Therefore, neither well is expecting geopressure at proposed total depth.

## HYDROGEN SULFIDE

In accordance with Title 30 CFR 250.417, Spinnaker requests that **Mustang Island Block 783** be classified by the Minerals Management Service as an area where the absence of hydrogen sulfide has been confirmed.

The basis for this determination is through the evaluation of **EXXON Mobil's Mustang Island Block 783 G 3028 No.1** well, which was drilled to (10257' TVD) the stratigraphic equivalents of the Target Sands proposed in this Plan.

PUBLIC  
INFORMATION



**SPINNAKER EXPLORATION COMPANY, L.L.C.**  
**MUSTANG ISLAND BLOCK 783**  
**OCS-G 22163**  
**SHALLOW HAZARDS ANALYSIS**

An evaluation of the potential shallow hazards and an assessment of possible cultural resources in the referenced block were conducted by KC Offshore during **October 1993**. Enclosed is a copy of your letter dated February 7, 2002 approving the use of the data obtained from this survey.

Our review of the high resolution geophysical survey data and archaeological assessment prepared by Thales Geosolutions, Inc. in March of 2002 and Tesla Offshore, LLC in May 2005 indicates that there are no hazards near surface locations A or B.

Mustang Island Block 783 is within a high probability zone for prehistoric shipwrecks, which requires a 50-meter survey line spacing with 100% sonar coverage. There were no shipwrecks detected within the surveyed area on the block outside the fairway. There were three (3) magnetic anomalies of unknown origin located within the surveyed area in the southwest corner of the block. None of the three (3) anomalies are near our proposed locations 'A' and 'B' in the northeast corner of Block 783. There were no side scan sonar contacts on the block within the surveyed area. There are three (3) pipelines crossing the west side of Block 783. They are not near our locations. Most of the block is taken up by a shipping fairway. Our proposed locations 'A' and 'B' are over 2900' and 1200', respectively, from the shipping fairway crossing Block 783.

Based on the reviewed data, published research and our interpretations, the probability of disturbing the presence of significant prehistoric cultural resources in the surveyed portion of Block 783, Mustang Island Area is assessed as poor.

All due caution will be exercised while conducting drilling and/or coring operations at these locations. Spinnaker will utilize differential GPS to position the rig. The rig will approach our proposed locations for positioning purposes from the southwest, well within the surveyed area.

  
Thomas G. Becnel  
Regulatory Affairs Manager

**PUBLIC  
INFORMATION**

## **SECTION D**

### **BIOLOGICAL AND PHYSICAL INFORMATION**

The seafloor disturbing activities proposed in this Plan will be at a water depth of **160-162** feet at locations **A** and **B**. The water depth ranges from **158-168** feet to the southeast across Mustang Island Block 783.

#### **MAPS**

Submitted under separate cover are the maps prepared using high-resolution seismic information and/or 3-D seismic data to depict bathymetry, seafloor and shallow geological features and the surface location of each proposed wells and structure.

#### **ANALYSIS**

Submitted under separate cover is the analysis of seafloor features and areas that could be disturbed by the activities proposed in this Plan.

#### **TOPOGRAPHIC INFORMATION**

MMS and the National Marine Fisheries Service (NMFS) have entered into a programmatic consultation agreement for Essential Fish Habitat that requires that no bottom disturbing activities, including anchors or cables from a semi-submersible drilling rig, may occur within 500 feet of the no-activity zone of a topographic feature. If such proposed bottom disturbings are within 500 feet of a no activity zone, the MMS is required to consult with the NMFS.

The activities proposed in this Plan are not affected by a topographic feature.

#### **PINNACLE REEF TRENDS**

**MUSTANG ISLAND BLOCK 783** is not a Pinnacle Trend Block; therefore the Live Bottom (Pinnacle Trend) Lease Stipulation does not apply.

#### **SHALLOW HAZARDS AND ARCHAEOLOGICAL ASSESSMENT**

Tesla Offshore's Archaeological and Shallow Hazards Analysis for loactions 'A' and 'B' are included as **Attachments D-1(A) AND D-1(B)**.



Tesla Offshore, LLC  
36499 Perkins Road  
Prairieville, Louisiana 70769  
Telephone: (225) 673-2163  
Fax: (225) 744-3116

May 24, 2005

Minerals Management Service (MS 5230)  
Gulf of Mexico OCS Region  
1201 Elmwood Park Blvd.  
New Orleans, LA 70123-2394

**RE: Spinnaker Exploration Company, L.L.C.  
Proposed OCS-G 22163 Well 'A' Surface Location  
Block 783, Mustang Island Area  
Archaeological & Shallow Hazard Analysis**

Dear Staff:

Spinnaker Exploration Company proposes to drill the OCS-G 22163 Well 'A' from a surface location at:

- **500' FNL & 330' FEL of Block 783, Mustang Island Area**

The MMS authorized Spinnaker Exploration Company to use existing geophysical data covering the entire lease portions outside Shipping Safety Fairway that bisects the block into NE and SW portions (MMS letter February 7, 2002 Ref. MS 5231). Thales GeoSolutions updated the existing data set acquire by KC Offshore in 1993 with 50-meter primary line spacing and 900-meter tie lines. Spinnaker Exploration Company operates the lease and selected Tesla Offshore, LLC to prepare this shallow hazard analysis and archaeological assessment of the proposed drill site to comply with **NTL No. 98-20 and NTL No. 2002-G01** from the Minerals Management Service. Geophysical record copies are enclosed for the magnetometer, side scan sonar, subbottom profiler, echo sounder, and near trace seismic sections from the survey line nearest the proposed well site as required by the MMS in **NTL No. 2003-G17**.

- **Water depth** is 160 feet surrounding the proposed drill site, and there were no topographic irregularities along the seafloor.
- **Seafloor soils** are silt (63%), clay (18%), and sand (19%) that appeared smooth and free of irregularities on the side scan records.
- **Identified man-made features** include P&A #1 well 6,000' west of the proposed well site. There were no pipelines or other wells in the NE/4 of Block 783 at the time of the fieldwork.
- **Magnetic anomalies** were not recorded in the NE portion of the 50-meter grid although two (2) anomalies were detected in the SW portion. The anomalies will not impact rig moves or drilling. Sonar data recorded drag scars on the seafloor, and the seafloor was clear of shipwrecks or obstructions.

*Attachment A-1(A)*

Spinnaker Exploration Company, L.L.C.  
Proposed OCS-G 22163 Well 'A' Surface Location  
Block 783, Mustang Island Area  
Archaeological & Shallow Hazard Analysis  
Page 2

- **Subbottom Data** showed a fault downthrown to the SE approximately 1,800' WNW of the propose site at the closest point. The proposed wellbore will not intersect the fault within the upper second of data. Analog seismic sections showed amplitude anomalies 300' west of the proposed location at depths of 1,686' below sea level and 1,920' below sea level. The proposed well bore will not intersect the bright spots, and normal drilling precautions will be employed when intersecting the intervals near the amplitude anomalies BML.

The operator has identified the primary hazards to rig movements, anchor deployments, and drilling. Subbottom profiles indicated that the near-seafloor layers at the proposed well site exhibit low probability for the occurrence of prehistoric archaeological features.. The proposed drilling will not disturb any shipwrecks based on the geophysical data within the lease.

The proposed well site, P&A well site, lease block and Fairway boundaries will be marked with appropriate marine survey equipment during rig moves and drilling to comply with the **MMS On-Site Requirements specified in NTL No. 98-20, Section IV, Item B.** In lieu of using buoys as stipulated in Item B-1, the operator requests MMS approval to mark potential hazards with best available technology using computer graphic screens that are integrated to DGPS positioning units aboard the drilling rig and all support vessels.

In further compliance with **Item B-2**, a map at a scale of 1:12,000 will be provided to key personnel on the drilling rig and anchor handling vessels. The field map will depict the location of the proposed well, any proposed anchor patterns, all pipelines in other parts of the lease, abandoned well sites, and Fairway boundaries. No magnetic anomalies will be disturbed by rig placement or drilling at the proposed well location.

Spinnaker Exploration Company, L.L.C. and subcontractors will apply the safest and best available technologies during rig moves and drilling operations.

Yours truly,



Robert J. Floyd Ph.D.  
Chief Geoscientist  
Marine Archaeologist



Tesla Offshore, LLC  
36499 Perkins Road  
Prairieville, Louisiana 70769  
Telephone: (225) 673-2163  
Fax: (225) 744-3116

May 24, 2005

Minerals Management Service (MS 5230)  
Gulf of Mexico OCS Region  
1201 Elmwood Park Blvd.  
New Orleans, LA 70123-2394

RE: **Spinnaker Exploration Company, L.L.C.**  
**Proposed OCS-G 22163 Well 'B' Surface Location**  
**Block 783, Mustang Island Area**  
**Archaeological & Shallow Hazard Analysis**

Dear Staff:

Spinnaker Exploration Company proposes to drill the OCS-G 22163 Well 'B' from a surface location at:

- **2,500' FNL & 100' FEL of Block 783, Mustang Island Area**

The MMS authorized Spinnaker Exploration Company to use existing geophysical data covering the entire lease portions outside Shipping Safety Fairway that bisects the block into NE and SW portions (MMS letter February 7, 2002 Ref. MS 5231). Thales GeoSolutions updated the existing data set acquire by KC Offshore in 1993 with 50-meter primary line spacing and 900-meter tie lines. Spinnaker Exploration Company operates the lease and selected Tesla Offshore, LLC to prepare this shallow hazard analysis and archaeological assessment of the proposed drill site to comply with **NTL No. 98-20 and NTL No. 2002-G01** from the Minerals Management Service. Geophysical record copies are enclosed for the magnetometer, side scan sonar, subbottom profiler, echo sounder, and near trace seismic sections from the survey line nearest the proposed well site as required by the MMS in **NTL No. 2003-G17**.

- **Water depth** is 162 feet surrounding the proposed drill site, and there were no topographic irregularities along the seafloor.
- **Seafloor soils** are silt (63%), clay (18%), and sand (19%) that appeared smooth and free of irregularities on the side scan records.
- **Identified man-made features** include P&A #1 well 6,700' NW of the proposed well site. There were no pipelines or other wells in the NE/4 of Block 783 at the time of the fieldwork.
- **Magnetic anomalies** were not recorded in the NE portion of the 50-meter grid although two (2) anomalies were detected in the SW portion. The anomalies will not impact rig moves or drilling. Sonar data recorded drag scars on the seafloor, and the seafloor was clear of shipwrecks or obstructions.

*Attachment D-1(B)*

Spinnaker Exploration Company, L.L.C.  
Proposed OCS-G 22163 Well 'B' Surface Location  
Block 783, Mustang Island Area  
Archaeological & Shallow Hazard Analysis  
Page 2

- **Subbottom Data** showed a fault downthrown to the SE approximately 3,150' NW of the proposed site at the closest point. The proposed wellbore will not intersect the fault within the upper second of data. Analog seismic sections showed an amplitude anomaly 150' south of the proposed location at a depth of 2,323' below sea level. Processed 3-D data have been used to assess the correct relative amplitude of the anomaly, and normal drilling precautions will be employed when intersecting the interval of the amplitude anomaly.

The operator has identified the primary hazards to rig movements, anchor deployments, and drilling. Subbottom profiles indicated that the near-seafloor layers at the proposed well site exhibit low probability for the occurrence of prehistoric archaeological features. The proposed drilling will not disturb any shipwrecks based on the geophysical data within the lease.

The proposed well site, P&A well site, lease block and Fairway boundaries will be marked with appropriate marine survey equipment during rig moves and drilling to comply with the **MMS On-Site Requirements specified in NTL No. 98-20, Section IV, Item B**. In lieu of using buoys as stipulated in Item B-1, the operator requests MMS approval to mark potential hazards with best available technology using computer graphic screens that are integrated to DGPS positioning units aboard the drilling rig and all support vessels.

In further compliance with **Item B-2**, a map at a scale of 1:12,000 will be provided to key personnel on the drilling rig and anchor handling vessels. The field map will depict the location of the proposed well, any proposed anchor patterns, all pipelines in other parts of the lease, abandoned well sites, and Fairway boundaries. No magnetic anomalies will be disturbed by rig placement or drilling at the proposed well location.

Spinnaker Exploration Company, L.L.C. and subcontractors will apply the safest and best available technologies during rig moves and drilling operations.

Yours truly,



Robert J. Floyd Ph.D.  
Chief Geoscientist  
Marine Archaeologist

## SECTION E

### Wastes and Discharge Information

The Minerals Management Service (MMS), U. S. Coast Guard (USCG) and the U.S. Environmental Protection Agency (EPA) regulate the overboard discharge and/or disposal of operational waste associated with drilling, completing, testing and/or production operations from oil and gas exploration and production activities.

**Minerals Management Service** regulations contained in Title 30 CFR 250.300 require operators to "prevent the unauthorized discharge of pollutants into offshore waters". These same regulations prohibit the intentional disposal of "equipment, cables, chains, containers, or other materials" offshore. Small items must be stored and transported in clearly marked containers and large objects must be individually marked. Additionally, items lost overboard must be recorded in the facility's daily log and reported to MMS as appropriate.

**U. S. Coast Guard** regulations implement the Marine Pollution Research and Control Act (MARPOL) of 1987 requiring manned offshore rigs, platforms and associated vessels prohibit the dumping of all forms of solid waste at sea with the single exception of ground food wastes, which can be discharged if the facility is beyond 12 nautical miles from the nearest shore. This disposal ban covers all forms of solid waste including plastics, packing material, paper, glass, metal, and other refuse. These regulations also require preparation, monitoring and record keeping requirements for garbage generated on board these facilities. The drilling contractor must maintain a Waste Management Plan, in addition to preparation of a Daily Garbage Log for the handling of these types of waste. MODU's are equipped with bins for temporary storage of certain garbage. Other types of waste, such as food, may be discharged overboard if the discharge can pass through 25-millimeter type mesh screen. Prior to off loading and/or overboard disposal, an entry will be made in the Daily Garbage Log stating the approximate volume, the date of action, name of the vessel, and destination point.

**U. S. Environmental Protection Agency** regulations address the disposal of oil and gas operational wastes under three Federal Acts. The Resource Conservation and Recovery Act (RCRA) which provides a framework for the safe disposal of discarded materials, regulating the management of solid and hazardous wastes. The direct disposal of operational wastes into offshore waters is limited under the authority of the Clean Water Act. And, when injected underground, oil and gas operational wastes are regulated by the Underground Injection Control program. If any wastes are classified as hazardous, they are to

be properly transported using a uniform hazardous waste manifest, documented, and disposed at an approved hazardous waste facility.

## SECTION E

### Wastes and Discharge Information

A National Pollutant Discharge Elimination System (NPDES) permit, based on effluent limitation guidelines, is required for any discharges into offshore waters. The major discharges from offshore oil and gas exploration and production activities include produced water, drilling fluids and cuttings, ballast water, and uncontaminated seawater. Minor discharges from the offshore oil and gas industry include drilling-waste chemicals, fracturing and acidifying fluids, and well completion and workover fluids; and from production operations, deck drainage, and miscellaneous well fluids (cement, BOP fluid); and other sanitary and domestic wastes, gas and oil processing wastes, and miscellaneous discharges.

Spinnaker has requested coverage under the Region VI NPDES General Permit GMG290000 for discharges associated with exploration and development activities **Mustang Island Block 783** and will take applicable steps to ensure all offshore discharges associated with the proposed operations will be conducted in accordance with the permit.

#### **Composition of Solid and Liquid Wastes**

The major operational solid waste in the largest quantities generated from the proposed operations will be the drill cuttings, drilling and/or completion fluids. Other associated wastes include waste chemicals, cement wastes, sanitary and domestic waste, trash and debris, ballast water, storage displacement water, rig wash and deck drainage, hydraulic fluids, used oil, oily water and filters, and other miscellaneous minor discharges.

These wastes are generated into categories, being solid waste (trash and debris), nonhazardous oilfield waste (drilling fluids, nonhazardous waste including cement and oil filters), and hazardous wastes (waste paint or thinners).

The type of discharges included in this permit application allow for the following effluents to be discharged overboard, subject to certain limitations, prohibitions and recordkeeping requirements.

**Drilling Fluids** - Generally is discharged overboard at a volume and rate dependent upon hole size intervals and downhole conditions. Volume is estimated from both pump rate and length of time, or from tank capacity if a bulk discharge occurs. The discharge of drilling fluids is classified as an intermittent discharge, with an estimated average flow of 250 barrels a day, but no more than 1000 bbls. per hour based on permit limitations.



## SECTION E

### Wastes and Discharge Information

**Drill Cuttings** - The drill cuttings are separated from the drilling fluid through the use of solids control equipment. Cuttings discharge rates and volumes will vary during the duration of the well, and are measured by estimating the volume of hole drilled. Constituents of drill cuttings include sand, shale and limestone from the wellbore. The discharge of drilling cuttings is classified as an intermittent discharge, with an estimated average flow of 100 barrels a day.

**Excess Cement** - Occasionally, excess slurry will be generated while cementing casing strings and/or setting of wellbore plugs and annulus jobs. The volume of cement discharges is calculated by subtracting the volume inside the well from the total volume pumped down hole.

**Well Treatment, Completion or Work-Over Fluids** - These fluids are circulated down the wellbore, and sometimes discharged overboard or captured in tanks for disposal at a onshore site. The discharge of these fluids is classified as an intermittent discharge, with an estimated average flow of 300 barrels a day. The volume of cement discharges is calculated by subtracting the volume inside the wellbore from the total volume pumped down hole.

**Sanitary and Domestic Waste** - The discharge of sanitary and domestic waste is classified as an intermittent discharge, with an estimated average flow of 40 barrels a day. An equal amount of domestic waste (from sinks, galleys, showers and laundries) is normally discharged.

**Deck Drainage** - Consisting of rainwater and wash water with no free oil, the volume of deck drainage is calculated by multiplying average rainfall by exposed deck area.

**Uncontaminated Water** - This included non-contact cooling water, discharges from the firewater system, and freshwater maker blow-down. Ballast water, which is sometimes used to maintain the stability of a drilling rig, might also be discharges. These discharges are classified as miscellaneous discharges in the NPDES permit application.

## SECTION E

### Wastes and Discharge Information

***Produced Water from Well Testing*** - This discharge would occur during the production test conducted after drilling and completing the wells. Much of the produced water would be vaporized as the gas is flared and/or burned. Excess water would be processed in a gravity separator and discharged in accordance with the limitations and conditions of the applicable NPDES General Permit.

In accordance with all Federal, State and Local rules and regulations, wastes which cannot be discharged overboard, will be transported to an appropriate treatment or disposal site.

#### **Overboard Discharges**

The wastes detailed in ***Attachments E-1 and E-3*** are those wastes generated by our proposed activities and are released into the receiving waters of the Gulf of Mexico at the lease site.

#### ***Disposed Wastes***

The wastes detailed in ***Attachment E-2*** are those wastes generated by our proposed activities that are disposed of by means of offsite release, injection, encapsulation, or placement at either onshore or offshore permitted locations for the purpose of returning them back to the environment.

Water Base and Oil Base Mud System Components and Additives are listed in ***Attachments E-4 and E-5***.

## Wastes and Discharges Information

The information provided in Table 1 and Table 2 are estimates only and are based on information and plans known at the time this plan was prepared. The type of waste, amount and rate to be discharged, recycled, or disposed of and the recycle and disposal locations may change from time to time during the project life.

**Table 1—Discharges**

**All discharges will be in accordance with EPA's general NPDES permit GMG 290000**

| <b>Type of Waste<br/>Approximate<br/>Composition</b>     | <b>Amount to be<br/>Discharged<br/>(volume or rate)</b> | <b>Maximum<br/>Discharge Rate</b>            | <b>Treatment<br/>and/or Storage,<br/>Discharge<br/>Location and<br/>Discharge<br/>Method</b> |
|--|---|--|--|
| Water-based drilling fluids                              | 2,000 bbl/well  | Bulk discharge of mud in casing following TA | <u>MU783</u><br>Discharge overboard  |
| Drill cuttings associated with water-based fluids        | 2,000 bbl/well  | Bulk discharge of mud in casing following TA | <u>MU783</u><br>Discharge overboard  |
| Drill cuttings associated with synthetic drilling fluids | None  | None   | None   |
| Muds, cuttings and cement at the seafloor                | 2,000 bbl/well  | Bulk discharge of mud in casing following TA | <u>MU783</u><br>Discharge overboard  |
| Produced water   | 40,000 bbl/day (maximum)                                | 40,000 bbl/day                               | <u>MU783</u><br>Treat for oil and grease and discharge overboard                             |
| Sanitary wastes  | 20 gals/person/day                                      | Not applicable                               | <u>MU783</u><br>Chlorinate and Discharge overboard   |
| Domestic wastes  | 30 gal/person/day                                       | Not applicable                               | <u>MU783</u><br>Remove floating solids and discharge overboard                               |

| Type of Waste<br>Approximate<br>Composition                           | Amount to be<br>Discharged<br>(volume or rate) | Maximum<br>Discharge Rate                              | Treatment<br>and/or Storage,<br>Discharge<br>Location and<br>Discharge<br>Method |
|---|--|--|--|
| Deck drainage   | 0-4,000 bbl/day<br>Dependant upon<br>rainfall  | Not applicable   | <u>MU783</u><br>Remove oil and<br>grease and<br>discharge<br>overboard           |
| Well treatment,<br>workover or<br>completion fluids                   | 300 bbls/day                                   | 300 bbls/day<br>during these<br>types of<br>operations | <u>MU783</u><br>Remove oil and<br>grease and<br>discharge<br>overboard           |
| Uncontaminated<br>fresh or seawater                                   | Varied   | Not applicable   | <u>MU783</u><br>Discharge<br>overboard   |
| Desalinization Unit<br>water  | 700 bbl/day                                    | Not applicable   | <u>MU783</u><br>Discharged<br>Overboard  |
| Uncontaminated<br>bilge water   | None   | None   | None   |
| Uncontaminated<br>ballast water                                       | 10,000 bbls                                    | 400 gal/min<br>(pump capacity)                         | <u>MU783</u><br>Discharged<br>overboard  |
| Misc discharges to<br>which treatment<br>chemicals have<br>been added | Varied   | Not applicable   | <u>MU783</u><br>Discharged<br>Overboard  |
| Other misc<br>discharges  | Varied   | Not applicable   | <u>MU783</u><br>Discharged<br>Overboard  |

**Table 2**  
**Disposal Table—Wastes Not Discharged**

| <b>Type of Waste<br/>Approximate<br/>Composition</b> | <b>Amount</b>        | <b>Rate per<br/>Day</b>  | <b>Name/Location of<br/>Disposal Facility</b>  | <b>Treatment<br/>and/or Storage,<br/>Transport and<br/>Disposal<br/>Method<sup>4</sup></b> |
|--|----------------------|--------------------------|--|--|
| Spent oil-based<br>drilling fluids and<br>cuttings   | 7000                 | 100 bbl/day<br>(average) | Newpark <sup>1</sup>   | Store in cuttings<br>box and transport<br>by boat to<br>shorebase                          |
| Spent synthetic-<br>based drilling<br>fluids         | None                 | None                     | None   | None   |
| Oil-contaminated<br>produced sand                    | 200 lbs/yr           | 0.6 bbl/day              | Newpark <sup>1</sup>   | Store in cuttings<br>box and transport<br>by boat to<br>shorebase                          |
| Waste Oil  | NA                   | NA                       | NA   | NA   |
| Norm-<br>contaminated<br>wastes                      | 1 ton                | Not<br>applicable        | Newpark <sup>1</sup>   | Transport to a<br>transfer station<br>via dedicated<br>barge                               |
| Trash and debris                                     | 1000 ft <sup>3</sup> | 3 ft <sup>3</sup>        | Tesoro dock<br>Harbor Island   | Transport in<br>storage bins on<br>boats to<br>shorebase                                   |
| Chemical<br>product wastes                           | 100 bbls             | 2 bbl/day                | Envirosolutions <sup>2</sup> or<br>Total Recycling<br>Technologies Inc. <sup>3</sup> | Transport in<br>barrels on boat to<br>shorebase  |
| Workover fluids-<br>Not Discharged                   | 150 bbls             | 2 bbl/day                | Vendor<br>or<br>Newpark <sup>1</sup>   | Transport in<br>barrels on boats<br>or barge to<br>shorebase                               |

<sup>1</sup> Newpark Transfer Stations to be utilized are located in Galveston TX and Port Arthur TX

<sup>2</sup> Envirosolutions is located in Baytown, TX.

<sup>3</sup> Total Recycling Technologies is located in Mexia, TX.

<sup>4</sup> Waste to be disposed of or recycled is normally brought to the shorebase by work boats. From the shorebase, it is usually transported to the disposal or recycling center by truck.

## SECTION E

### QUANTITIES AND RATES OF DISCHARGES

| WELL | DEPTH | HOLE SIZE | QUANTITY<br>(BBLs) | MAX. DISCHARGE RATE    |
|------|-------|-----------|--------------------|------------------------|
| A    | 500   | 26        | 350                | Maximum 1000 bbls/hour |
|      | 1000  | 18-5/8    | 200                | Maximum 1000 bbls/hour |
|      | 4500  | 13-3/8    | 450                | Maximum 1000 bbls/hour |
|      | 10466 | 9-5/8     | 550                | Maximum 1000 bbls/hour |
|      |       |           |                    |                        |
| B    | 500   | 26        | 350                | Maximum 1000 bbls/hour |
|      | 1000  | 18-5/8    | 200                | Maximum 1000 bbls/hour |
|      | 4500  | 13-3/8    | 450                | Maximum 1000 bbls/hour |
|      | 9912  | 9-5/8     | 500                | Maximum 1000 bbls/hour |

**TOTAL BARRELS - 3050 bbls**

## DRILLING MUD COMPONENTS

| <u>COMMON CHEMICAL OR<br/>CHEMICAL TRADE NAME</u> | <u>DESCRIPTION OF MATERIAL</u>                   |
|---|--|
| Aluminum Stearate                                 | Aluminum Stearate                                |
| "AKTAFLO-S"                                       | Nonionic Surfactant                              |
| Barite  | Barium Sulfate (BaSO <sub>4</sub> )              |
| Calcium Carbonate                                 | Aragonite (CaCO <sub>3</sub> )                   |
| Calcium Chloride                                  | Hydrophilite (CaCl <sub>2</sub> )                |
| Calcium Oxide                                     | Lime (Quick)                                     |
| Calcium Sulfate                                   | Anhydrite (CaSO <sub>4</sub> )                   |
| Carboxymethyl Cellulose                           | Carboxymethyl Cellulose                          |
| Caustic Potash                                    | Potassium Hydrate                                |
| Caustic Soda                                      | Sodium Hydroxide (NaOH)                          |
| Chrome Lignite                                    | Chrome Lignite                                   |
| Chrome Lignosulfonate                             | Chrome Lignosulfonate                            |
| Drilling Detergent                                | Soap   |
| "E-Pal"   | No-toxic, biodegradable defoamer                 |
| Ferrochrome Lignosulfonate                        | Derived from wood pulp                           |
| Gel   | Sodium montmorillonite, bentonite,<br>attapulgit |
| Gypsum  | CaSO <sub>4</sub> .2H <sub>2</sub> O             |
| Lignite   | Lignite  |
| Lignosulfonate                                    | Lignosulfonate                                   |
| "Mud-Sweep"                                       | Cement Pre-Flush                                 |
| "MOR-REX"   | Hydrolyzed Cereal Solid                          |
| "Shale-Trol"                                      | Organo-aluminum complex                          |
| Sapp  | Sodium Acid Pyrophosphate                        |
| Soda Ash  | Sodium Carbonate                                 |
| Sodium Bicarbonate                                | NaHCO <sub>3</sub>                               |
| Sodium Carboxymethyl Cellulose                    | Sodium Carboxymethyl Cellulose                   |
| Sodium Chloride                                   | NaCl   |
| Sodium Chromate                                   | NaCrO <sub>4</sub> .10H <sub>2</sub> O           |
| Starch  | Corn Starch                                      |
| "TX-9010"   | Biodegradable drilling lubricant                 |
| "TORO-Trim"                                       | Biodegradable drilling lubricant                 |

## MUD ADDITIVES

### COMMON CHEMICAL OR CHEMICAL TRADE NAME

### DESCRIPTION OF MATERIAL

"Black Magic"

Oil base mud conc.

"Black Magic Supermix"

Sacked concentrated oil base mud

Diesel

Used to mix certain loss-circulation

pills

"Jelflake"

Plastic foil, shredded cellophane

MICA

Loss-circulation material

"Pipe-Lax"

Surfactant mixed with diesel

"Wall-nut"

Ground walnut shells



**Mustang Island Block 783  
OCS-G22163**

**Diesel Oil Base Mud Component Parts**

|                 |                           |                                      |
|-----------------|---------------------------|--------------------------------------|
| Diesel          | hydrocarbon oil           | Base Fluid                           |
| Water           | fresh H2O                 | Volume Builder                       |
| Salt            | calcium chloride          | Salinity Control                     |
| VG-Plus         | organophilic clay         | Viscosifier                          |
| Versawet        | organic surfactant        | Oil-Wetting Agent                    |
| Versatrol       | gilsonite                 | Filtration Control                   |
| <b>Versamul</b> | <b>organic agents in</b>  | <b>Stabilizer, Emulsifier,</b>       |
|                 | <b>a mineral oil base</b> | <b>Filtration &amp; Temp Control</b> |
| Versacoat       | organic surfactant        | Emulsifier                           |
| Safe-Carb       | ground marble             | Bridging & Weighting Agent           |
| MIX II          | cellulose fiber           | Bridging Agent                       |
| Barite          | barium sulfate            | Weighting Agent                      |
| Lime            | calcium hydroxide         | pH Control                           |
| G-Seal          | graphite                  | Bridging Agent                       |

## SECTION F

### OIL SPILL RESPONSE AND CHEMICAL INFORMATION

The Regional Oil Spill Response Plan (OSRP) Bi-Annual Update was approved by MMS April 6, 2005. Activities proposed in this **EP** will be covered by the Regional OSRP.

Spinnaker'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.

In the event of a spill, mechanical response equipment located at CGA's base in **Galveston, Texas** would be transported to a staging area in **Harbor Island, Texas**.

The worst case discharge (WCD) proposed in this **EP** is equal to 1001 barrels and does not supercede the WCD as approved in our Regional OSRP. If our evaluation reveals that this WCD does in fact have the potential of having a more adverse impact than our currently identified WCD in our existing Regional OSRP, then Spinnaker will amend the Regional OSRP as required.

Activities proposed in this **EP** are considered far-shore (>10 miles from the shoreline). The Worst Case Discharge (WCD) scenario from the proposed activities in this **EP** and the WCD in the Regional OSRP on file with the MMS are compared below:

#### Comparison of WCD's in OSRP to Proposed Operations

| <b>Category</b>                          | <b>Regional OSRP<br/>WCD</b> | <b>EP<br/>WCD</b> |
|--|------------------------------|-------------------|
| Type of Activity                         | Drilling                     | Drilling          |
| Spill Loc. (Area/Block)                  | SS273                        | MU783             |
| Facility Designation                     | Jack-up                      | Jack-up           |
| Distance to Nearest<br>Shoreline (miles) | <b>54.6</b>                  | <b>29.9</b>       |
| Volume (bbls)                            | <b>1001</b>                  | <b>1001</b>       |
| Type of Oil<br>(crude, cond., diesel)    | Condensate                   | Condensate        |
| API Gravity                              | <b>50.0°</b>                 | <b>54.0°</b>      |

## **Worst-Case Discharge**

The Regional Oil Spill Response Plan (OSRP) Bi-Annual Update was approved by MMS April 6, 2005. Activities proposed in this **EP** will be covered by the Regional OSRP.

Since **Spinnaker** has the capability to respond to the worst case spill scenario included in its approved (**Approved April 28, 2004**) regional OSRP **as amended for >10-mile production category May 25, 2004** and for the exploratory drilling category **June 22, 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 **Spinnaker** has the capability to respond, to a worst case discharge, or a substantial threat of such a discharge, resulting from the activities proposed in our **EP**.

**Spinnaker Exploration Company, L.L.C.** is the only company covered by our OSRP.

### **Description of Response to Worst-Case Discharge**

This location is over **29.9** miles off the Texas Coast. The condensate production from well **G22163 No.1** is expected to be high gravity (**54°+** API gravity). It will dissipate rapidly after hitting the water. If a blow out were to occur during a hurricane, Spinnaker would send a well control team to the rig once the weather moved inland of the coastline. We would probably dispatch one or two CGA Fast Response Vessels of Opportunity to the site to stand-by with their booms deployed down current of the location. The vessels would skim as long as the well was flowing. One vessel could also chase any intermittent discharges that might happen to get past the other's deployed boom. Once the well is brought under control and capped, Spinnaker would either complete or abandon it.

It would take approximately 10-12 hours to procure the necessary equipment, get it loaded on a vessel or vessels of opportunity and transport the FRU(s) (trailer mounted Fast Response Unit available to CGA members) to the site. If a CGA Fast Response Vessel or vessels were available and in **Harbor Island**, it would just take the **3-4** hours of travel time getting to the location.

Included as **ATTACHMENT F-1**, is the MSRC's (Marine Spill Response Corporation) Equipment Inventory and Locations along the Gulf Coast.

Included as **ATTACHMENT F-2**, is the Mobilization and Deployment Methods Section of Spinnaker's Regional Oil Spill Response Plan.

Included as **ATTACHMENT F-3**, is the Oil/Water/Debris Strategies Section of Spinnaker's Regional Oil Spill Response Plan.

**DESCRIPTION OF VESSELS (This is also discussed in Section A.)**

**Work Boat   Length – 180'; 3500 HP; Fuel Capacity – 80,000 gallons**

**Crew Boat   Length – 120'; 2000 HP; Fuel Capacity – 45,000 gallons**

**Jack-up Rig Rating – 350';            Fuel – 21,000-25,000 gallons**

**Engine Oil – 650-850 Gallons**

Hydraulic Oil – 400-500 Gallons

Gear Oil – 200-300 Gallons

BOP Fluid – 200-300 gallons

1 ea. 500 Gallon used oil tank

**Dive Boat – 150'; 2000 HP; Fuel Capacity – 45,000 gallons**

**Diesel fuel – API gravity - 32°**



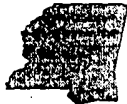
GULF OF MEXICO  
REGIONAL OIL SPILL RESPONSE PLAN—OFFSHORE OPERATIONS  
APPENDIX E—RESPONSE EQUIPMENT  
SPINNAKER EXPLORATION COMPANY, L.L.C.

## APPENDIX E—RESPONSE EQUIPMENT

### A. Equipment Inventory

Spinnaker Exploration Company's offshore response strategy is built around the oil spill containment and recovery equipment provided by Clean Gulf Associates (CGA) and supported by Marine Spill Response Corporation (MSRC). MSRC is responsible for storing, inspecting, maintaining and dispatching CGA's equipment. Trained Oil Spill Removal Organizations (OSROs) will operate the CGA equipment.

In the event that Spinnaker Exploration Company requires the use of any equipment from CGA, the Incident Commander will contact MSRC to mobilize the equipment.

| <b>CGA/MSRC - Lake Charles, LA</b>  |  |   |  |
|---|--|---|--|
| <b>24 Hr. Spill Response Hotline—(888) CGA-2007</b>   |  |   |  |
| Web Page - <a href="http://www.cleangulfassoc.com">www.cleangulfassoc.com</a>                   |  |   |  |
| CGA/MSRC equipment locations can be contacted directly as follows:                              |  |   |  |
| STATE   | OFFICE LOCATION  | PHONE NUMBER  |  |
|  TEXAS       | Ingleside<br>Galveston                                     | (361) 776-5336<br>(409) 740-9188                        |  |
|  LOUISIANA   | Lake Charles<br>Intracoastal City<br>Houma<br>Fort Jackson | (337) 475-6464<br>*<br>(985) 580-0924<br>(985) 657-9135 |  |
|  MISSISSIPPI | Pascagoula   | (228) 769-9598  |  |

\* Equipment only

The Incident Commander may contact other service companies in the event additional equipment, materials or personnel would be necessary to contain, control and remove the spill. **APPENDIX F** contains a list of support services and supplies.

A Spill Response Equipment Inventory list of CGA and contractor equipment (by MSO area) is included in this section. This list will be utilized to locate response equipment and personnel from Oil Spill Removal Organizations on the Gulf Coast. (See **FIGURES E.1** through **E.5**.)

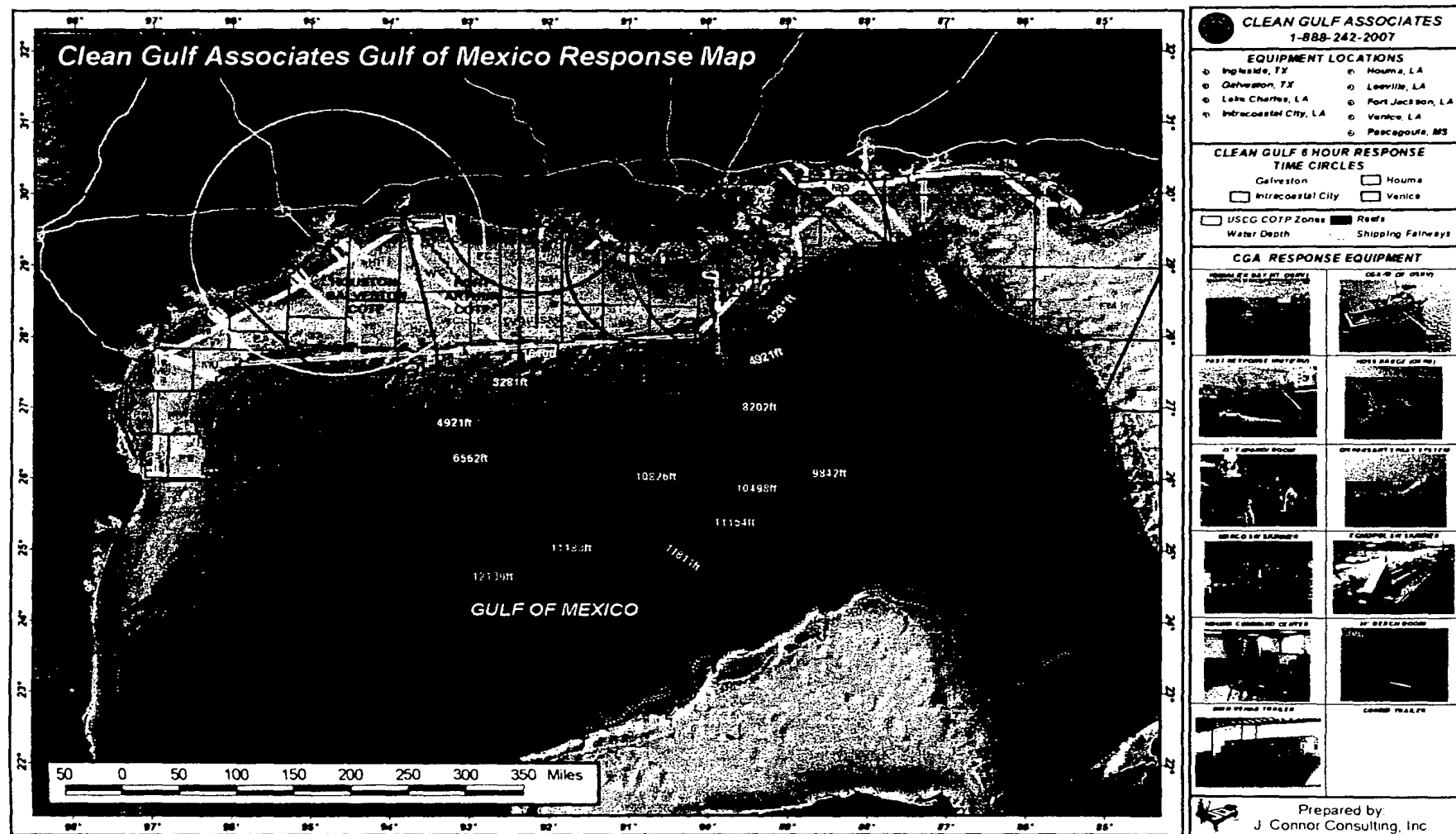
**B. Inspection and Maintenance Programs**

Clean Gulf Associates (CGA) ensures the inspections and testing of each piece of pollution response equipment (that lends itself to testing) monthly and repairs are made immediately in accordance with MSRC's contract with CGA. Records of equipment inspections and test results are maintained at each CGA / MSRC base and are available for inspection by Minerals Management Service (MMS) personnel.

In addition to the CGA monthly inspections and tests, each type of pollution response equipment is deployed at least once every 3 years to assure readiness of the equipment. Records of equipment deployed are maintained at each MSRC base and available to MMS personnel.

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**FIGURE E.1**  
**CGA EQUIPMENT LOCATIONS**



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**FIGURE E.2**



**Clean  
Gulf  
Associates**

## Oil Spill Response Equipment Quick Reference Sheet

Note: This is a partial list of major CGA equipment. A complete listing can be viewed or downloaded at [www.cleangulfassoc.com](http://www.cleangulfassoc.com)

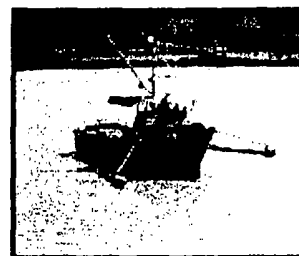
### HOSS BARGE

**Length:** 174 ft.  
**Recovery Rate:** 43,000 bbls/day  
**Storage Capacity:** 4,130 bbls  
**Top Towing Speed:** 5 - 7 K  
**Description:** This High Volume Open Sea Skimmer (HOSS) barge is designed for skimming extensive long duration spills in the stationary mode. Assisted by two tugs, the boom stored on two sides of the barge is launched off the barge stem by a hydraulic reel system to concentrate oil into the skimmer. Four Marco belt skimmers are mounted in the barge followed by weir skimmers. Equipped with a helipad, and 16 person bunk house.



### CGA Bay Class Response Vessels

**Length:** 46 ft.  
**Recovery Rate:** 4,944 bbls/day  
**Storage capacity:** 65 bbls  
**Top Speed:** 23 K  
**Description:** CGA has 3 bay-class skimming vessels which can operate in a shallow near-shore environment and a moderate offshore area. Two outriggers and skimming booms divert oil into 2 LORI brush skimmers built into the hull of the vessel. These vessels are fully equipped with navigation, communications, and dispersant application equipment.



### Fast Response Unit (FRU)

**Recovery Rate:** 3,400 bbls/day  
**Storage Capacity:** 100 bbls  
**Top Speed:** 12 K  
**Description:** This self-contained skimming system is designed to be deployed from the right side of a vessel of opportunity (utility boat) in stationary or advancing mode. Each system has a primary skid that consists of a deployment crane, boom, weir skimmer, pump, and a recovered oil separator tank.



### Marco Shallow Water Skimmer

**Length:** 34-38 ft  
**Recovery Rate:** 200 bbls/day  
**Storage Capacity:** 20-34 bbls  
**Top Speed:** 12 K  
**Description:** These self-propelled boats are capable of inland skimming in a stationary or advancing mode. The boat is equipped with Marco belt skimming system and boom may be attached to increase the swath path. The skimmers are trailer mounted and require an over-width permit.



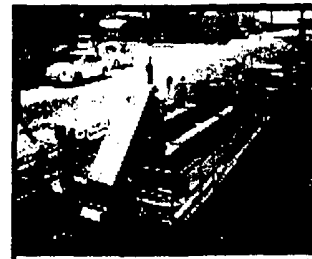
### CGA 57 (Oil Spill Response Vessel)

**Length:** 37 ft.  
**Recovery Rate:** 3,700 bbls/day  
**Storage Capacity:** 46 bbls/day  
**Top Speed:** 18 K  
**Description:** This rapid response oil skimming boat can operate offshore and nearshore. A single outrigger and skimming boom combination diverts oil into a LORI 3 brush skimmer. Fully equipped with navigation and communication equipment.



### Egmopol Shallow Water Skimmer

**Length:** 34.6 ft.  
**Recovery Rate:** 3,000 bbls/day  
**Storage Capacity:** 100 bbls  
**Top Speed:** 6 K  
**Description:** This self-propelled barge designed for inland skimming in stationary or advancing mode. The boat is equipped with a Egmopol belt skimmer and boom may be attached to increase the swath path. The skimmers are trailer mounted and require an Over-width permit.



### Expandi Boom

**Length:** 500 ft./roll  
**Weight:** 2,400 lbs.  
**Description:** This self inflatable 43' open sea boom is designed to be deployed in offshore and nearshore environments. Can be air lifted with helicopter.



### Shoreline (Beach) Boom

**Length:** 500 ft. / box  
**Weight:** 2,400 lbs.  
**Description:** This inter-tidal 22' inflatable boom is intended to protect the shoreline from oil spills. The water ballast chamber seals effectively to sand and mud, the water chamber will settle on the bottom and prevent oil from escaping or entering the area. Can be airlifted with a helicopter.





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**FIGURE E.3**  
**SPILL RESPONSE CONTRACTORS**  
**(BY RESPONSE ZONE)**

| Contractor Number | Personnel Contractors  | CONTRACTOR PERSONNEL PER RESPONSE ZONES |           |             |             |             |        |
|-------------------|--|---|-----------|-------------|-------------|-------------|--------|
|                   |  | Corpus Christi                          | Galveston | Port Arthur | Morgan City | New Orleans | Mobile |
| 1                 | <b>American Pollution Control (AMPOL)</b><br><br><u>All Locations:</u> (800) 482-6765<br>New Iberia, LA (337) 988-7460   |   |           |             | 54          |             |        |
| 2                 | <b>Garner Environmental Services</b><br><br><u>All Locations:</u> (800) 424-1716<br>Houston, TX (281) 930-1200<br>La Marque, TX (409) 935-0308<br>Port Arthur, TX (409) 983-5646<br>New Orleans, LA (504) 254-2444                 | 6                                       | 66        | 25          |             | 40          |        |
| 3                 | <b>Industrial Cleanup, Inc.</b><br><br><u>All Locations:</u> (800) 436-0883<br>Lafayette, LA (337) 234-5104<br>New Orleans, LA (504) 362-8850 (24 hr)<br>New Orleans, LA (504) 361-5372<br>Westwego, LA (985) 535-2679             |   |           |             | 10          | 35          |        |
| 4                 | <b>Oil Mop, Inc.</b><br><br><u>All Locations:</u> (800) OILMOP1<br>Abbeville, LA Houma, LA<br>Baton Rouge, LA Intracoastal City, LA<br>Belle Chasse, LA Lake Charles, LA<br>Cameron, LA Morgan City, LA<br>Fourchon, LA Venice, LA |   |           | 6           | 15          | 19          |        |
| 5                 | <b>PSC Industrial Services</b><br><br><u>All Locations:</u> (800) 797-9992<br>Jeanerette, LA (337) 276-5163<br>Morgan City, LA (985) 384-7712<br>New Orleans, LA (504) 523-2758<br>Venice, LA (985) 534-2008                       |   |           |             | 65          | 60          |        |

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**FIGURE E.4**  
**CLEAN GULF ASSOCIATION (CGA) OIL SPILL RESPONSE EQUIPMENT**

September 2004

| LOCATION            | Offshore<br>Skimmers  | Inland<br>Skimmers               | Large<br>Boom                | Shoreline<br>Boom | Chemical<br>Dispersants<br>(Drums) | Bird<br>Scare<br>Guns | TRAILERS |                   |      |
|---------------------|---|----------------------------------|------------------------------|-------------------|------------------------------------|-----------------------|----------|-------------------|------|
|                     |   |                                  |                              |                   |                                    |                       | Comm.    | Wildlife<br>Rehab | Bio. |
| <b>TEXAS</b>        |   |                                  |                              |                   |                                    |                       |          |                   |      |
| Ingleside           | 1 FRU   | ----                             | 1,750' Expandi               | 1,000'            | ----                               | 1 Set                 | ----     | ----              | ---- |
| Sugar Land          |   |                                  |                              |                   | 527 (Corexit 9500)                 |                       |          |                   |      |
| Galveston           | 1 FRU<br>R/V Timbalier Bay (46')  | CGA 54 (EGMOPOL)                 | 2,500' Expandi               | 2,000'            | 6 (Corexit 9527)                   | 1 Set                 | ----     | ----              | ---- |
| <b>LOUISIANA</b>    |   |                                  |                              |                   |                                    |                       |          |                   |      |
| Lake Charles        | 1 FRU<br>R/V Bastian Bay  | CGA 51 (MARCO)                   | 5,500' Expandi<br>1,000' 42" | 2,000'            | ----                               | 2 Sets                | 1        | ----              | 1    |
| Houma               | HOSS Barge<br>3 FRUs<br>1 Rope Mop<br>R/V CGA 57 (37')<br>R/V Armstrong (46') | CGA 52 (MARCO) &<br>55 (EGMOPOL) | 5,000' Expandi               | 2,000'            | 90 (Corexit 9527)                  | 2 Sets                | ----     | 1                 | ---- |
| Fort Jackson/Venice | 2 FRUs<br>R/V Grand Bay (46')   | CGA 53 (MARCO)                   | 3,000' Expandi<br>1,000' 42" | 1,000'            | 7 (Corexit 9527)                   | 2 Sets                | ----     | ----              | ---- |
| <b>MISSISSIPPI</b>  |   |                                  |                              |                   |                                    |                       |          |                   |      |
| Pascagoula          | 1 FRU   | ----                             | 3,000' Expandi               | 2,000'            | ----                               | 2 Sets                | ----     | ----              | ---- |

**LEGEND**

1 Set Bird Scare Guns = 12 each.

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**FIGURE E.4**  
**CLEAN GULF ASSOCIATION (CGA) EQUIPMENT SPECS AND REQUIREMENTS**

September 2004

| Description   | Derating<br>Bbl/Day                       | Storage<br>Capacities<br>Bbl | Personnel Required to<br>Operate Equipment                | Vessel Requirements   | Auxiliary Needs  |
|---|---|------------------------------|---|---|--|
| <b>Dispersant Aircraft</b>  |   |                              |   |   |  |
| 1 - DC-4 (2000 gallon dispersant payload)<br>2 - DC-3 (1000 gallon dispersant payload)  | ----                                      | ----                         | Airborne Support Inc.<br>Pilot Required                   | ----  | 1 - Spotter Aircraft<br>1 - Pilot<br>1 - Experienced Spotter   |
| <b>Offshore Skimmers</b>  |   |                              |   |   |  |
| HOSS Barge  | 43,000                                    | 4,130                        | 8 Laborers<br>1 Aviation Controller<br>3 MSRC Supervisors | 1 - 1,800 HP Tow Boat and Tug<br>2 - 1,200 HP Tow Boats and Tugs for Boom | ----   |
| 9-FRU's   | 3,400                                     | 200                          | 4 to 6  | 1 - Utility Boat (with 65' deck space)                                    | 1 - Storage vessel for offloading recovered oil.<br>1 - Mechanic for set-up and maintenance.<br>1 - Some units trailer mounted (need crane). |
| CGA 57 (37 feet - staged in Houma, LA)<br>Bastian Bay (46ft, staged in Lake Charles, LA)<br>Grand Bay (46 ft, staged in Venice, LA)<br>Timbalier Bay (46 ft, staged in Galveston, TX)<br>Armstrong (46 ft, staged in Houma, LA) | 3,700<br>5,000<br>5,000<br>5,000<br>5,000 | 46<br>65<br>65<br>65<br>65   | 3   | ----  | ----   |
| <b>Inland Skimmers</b>  |   |                              |   |   |  |
| CGA 51 (MARCO) —Lake Charles, LA<br>CGA 52 (MARCO) — Houma, LA<br>CGA 53 (MARCO) —Fort Jackson, LA<br>CGA 54 (EGMOPOL) —Galveston, TX<br>CGA 55 (EGMOPOL) —Houma, LA  | 288<br>288<br>288<br>3,000<br>3,000       | 20<br>34<br>34<br>100<br>100 | 3 - 4   | ----  | Need CGA 50 bbl barges for recovered oil.<br>(2 in Houma, LA, 2 in Lake Charles, LA and 2 in<br>Fort Jackson, LA)                            |

**LEGEND**

Corexit 9527 — 103 Drums at ASI in Houma, Louisiana.  
Corexit 9500 — 527 Drums at Nalco/Exxon in Sugar Land, Texas.  
Corexit 9527 — 6-7 drums stored on each 46' response vessel  
(1 Drum Dispersant = 55 gallons.)

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**FIGURE E.5**  
**SPILL RESPONSE EQUIPMENT INVENTORY**

☆ = STARS Responder

| Company  | Offshore<br>Skimmers | Inland<br>Skimmers   | Boom<br>>24" | Boom<br>4"-24"              | Viscous<br>Sweep | Product<br>Storage   | Misc.                   | Small<br>Vessels   |
|--|----------------------|--|--------------|-----------------------------|------------------|--|-------------------------|--|
| <b>Corpus Christi Area</b>   |                      |  |              |                             |                  |  |                         |  |
| CC Area Oil Spill Control Assoc.<br>Corpus Christi, TX<br>Ph: (361) 882-2656 |                      | (1) 28' Skimmer<br>(5) 44 to 300 GPM<br>(1) 24' Skimmer Barge                                      |              | (500') 24"<br>(11,500') 18" |                  | 12/24/60 bbl Storage Bladders<br>(1) Tank Barge<br>(1) 60 bbl Tank Trailer<br>(1) 75 bbl Tank Truck  |                         | (1) 71' Fireboat<br>(1) 28'<br>(6) Work Boats<br>(1) 21' Airboat           |
| Marine Salvage & Services<br>Port Isabel, TX<br>Ph: (210) 943-2648           |                      |  |              |                             | 3100'            | (1) Vacuum Truck<br>(1) 20,000 gallon Barge<br>(70) 2250 gal Bladders  |                         |  |
| Miller Environmental ☆<br>Corpus Christi, TX<br>Ph: (361) 289-9800           | (2) FRU's            | (4) 16 yd Super<br>Suckers<br>(1) Saucer Skimmer<br>(9) 70 bbl Vac Trucks<br>(1) 130 bbl Vac Truck |              | (2000') 10"<br>(3000') 18"  |                  | (200) 55 gallon DOT Drums<br>(10) 85 gallon Overpak Drums<br>(100) 20 yard Roll Off Boxes<br>(2) 400 bbl Vertical Tanks<br>(1) 500 bbl Frac Tank |                         | (5) Jon Boats<br>(1) Push Boat 24'<br>(1) Airboat 14'<br>(2) Response 16'  |
| National Response Corp.<br>Corpus Christi, TX<br>Ph: (800) 899-4672          |                      | (1) Barge - Valient  |              | (100') 18"                  |                  |  |                         |  |
| TGLO<br>Aransas Pass, TX<br>Ph: (361) 758-7228                               |                      | (3) Drums<br>(1) JBF   |              | (4300') 18"                 |                  | (6) Fast Tanks<br>(3) Bladders   | (40) Bird Scare<br>Guns |  |
| U.S. Coast Guard - MSO<br>Corpus Christi, TX<br>Ph: (361) 888-3193           |                      | (2) Desmi 250  |              | (1000') 24"<br>(2000') 18"  |                  | (1) 600 bbl Barge  |                         |  |
| U.S. Naval Station<br>Ingleside, TX<br>Ph: (361) 929-2918                    |                      | (1) Belt   |              | (13,000') 24"               |                  |  |                         |  |
| <b>Corpus Christi Area</b>   |                      |  |              |                             |                  |  |                         |  |
| Waste Control Services<br>Corpus Christi, TX<br>Ph: (361) 289-6466           |                      | (1) Drum<br>(1) Rope Mop<br>(1) Wier<br>(1) Duck Bill  |              | (2000') 18"                 |                  |  |                         | (1) Alum. Work 23'<br>(2) Jon Boats<br>(1) Airboat 18'<br>(1) Response 18' |

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**FIGURE E.5**  
**SPILL RESPONSE EQUIPMENT INVENTORY**

★ = STARS Responder

| Company   | Offshore<br>Skimmers | Inland<br>Skimmers   | Boom<br>>24"               | Boom<br>4"-24"                                   | Viscous<br>Sweep | Product<br>Storage  | Misc.                         | Small<br>Vessels                                  |
|---|----------------------|--|----------------------------|--|------------------|---|-------------------------------|---|
| <b>Galveston Area</b>   |                      |  |                            |  |                  |   |                               |   |
| Garner Environmental Services<br>Houston, TX ★<br>Ph: (281) 930-1200  |                      | (3) Disc<br>(5) Weir   |                            | (1000') 6"<br>(9100') 18"<br>(300') 24"          |                  | (1) 80 bbl Vacuum Truck   | (1)<br>Communication<br>Table | (1) Flat Bottom<br>(5) Bay Boats<br>(8) Jon Boats |
| Garner Environmental Services<br>LaMarque, TX ★<br>Ph: (409) 935-0308 |                      | (1) Weir<br>(1) Rope Mop   | (2800') 36"<br>(2000') 48" | (10,500') 18"<br>(500') 6.5"                     |                  | (8) 80 bbl Vacuum Trucks<br>(4) 80 bbl Super Suckers<br>(1) 80 bbl Skid Tank    |                               | (4) Jon Boats<br>(2) Bay Boats                    |
| Texas General Land Office<br>La Porte, TX<br>Ph: (281) 470-6597       |                      |  |                            |  |                  |   | (1) Bird Trailer              |   |
| Waste Control Services<br>Channelview, TX<br>Ph: (800) 832-7536       |                      | (1) Pipe Skimmer<br>(1) Rope Mop Skimmer<br>(1) Mini-Max<br>(1) Duck Bills |                            | (1000') Containment<br>(500') Fire<br>(500') Tow |                  | 2700 gallon   |                               | (2) Jon Boats<br>(1) Lowe 15'                     |
| <b>Port Arthur Area</b>   |                      |  |                            |  |                  |   |                               |   |
| Garner Envir. Svcs. ★<br>Port Arthur, TX<br>Ph: (409) 983-5646        |                      | (2) Weir<br>(1) JBF 3001 Skimmer   |                            | (9500') 18"                                      |                  |   |                               | (6) Jon Boats<br>(1) 26'                          |
| Laidlaw Envir. Svcs.<br>Port Arthur, TX<br>Ph: (409) 796-1388         |                      |  |                            | (7000') 18"                                      |                  | (6) 80 bbl Vacuum Trucks<br>(12) 55 bbl Vacuum Trucks<br>(4) 500 bbl Frac Tanks |                               | (15) Jon Boats<br>(2) Air Boats                   |

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| Morgan City Area  |   |   |  |  |  |  |  |  |
|---|---|---|--|--|--|--|--|--|
| AMPOL ★<br>Port of Iberia, LA<br>Ph: (800) 482-6765                         | (1) GT 185<br>(1) MOSS unit<br>(1) Vikoma | (3) Hand Held<br>(2) Rope Mop   |  | (1300') 18"<br>(8400') 18"<br>(4000') 24"<br>(1000') 10" |  | (2) 750 gal Storage Tanks<br>(2) 2000 gal Storage Tanks  | (2) Roto-Pac w/Spare Turn Table<br>(1) Boat Spray System | (6) Jon Boats<br>(14) 35' - 185'                               |
| AMPOL ★<br>Houma, LA<br>Ph: (800) 482-6765                                  | (1) GT 185<br>(1) MOSS unit               |   |  | Hydraulic Boom<br>(1300') Expandi<br>(720') Expandi      |  | (1) 2000 gallon Tank   | (1) Boat Spray System                                    | (2) Utility Boats  |
| CENAC Barge & Towing ★<br>Houma, LA<br>Ph: (985) 872-2413                   |   |   |  |  |  | 25,000 bbl Open Ocean Barge<br>24,000 bbl Open Ocean Barge<br>23,000 bbl Open Ocean Barge<br>11,000 bbl Inland Barge<br>9,500 bbl Inland Barge |  |  |
| Envir. Equip., Inc.<br>Houma, LA (Site 1)<br>Ph: (985) 868-3100             |   | (3) Weir  |  | (2800') 18"<br>(2000') 18"                               |  |  |  | (7) Jon Boats<br>(1) Whaler 21'                                |
| Envir. Equip., Inc.<br>Houma, LA (Site 2)<br>Ph: (985) 868-3100             |   |   |  |  |  | (1) 12,000 bbl Tank Barge  |  | (1) Fireboat<br>(25) Barges<br>(1) Pontoon Vessel<br>(6) Flats |
| Envir. Equip., Inc.<br>Lockport, LA (Site 3)<br>Ph: (985) 868-3100          |   |   |  | (1000') 18"  |  | (7) Vacuum Trucks<br>(15) 286 bbl Storage Tanks  |  |  |
| ES&H Cenac Env. ★<br>Consulting Services<br>Houma, LA<br>Ph: (985) 851-5350 |   | (12) Slickbar Manta Ray<br>(1) Skimpack<br>(4) Slick Skim<br>(1) Skickbar Slurp<br>(4) Drum |  | (10,000') 18"  |  |  |  | (15) Jon Boats<br>(4 of them are over 25')                     |
| Industrial Cleanup Inc. ★<br>Lafayette, LA<br>Ph: (800) 436-0883            |   |   |  | (3000') 18"  |  |  |  | (4) Jon Boats  |
| Industrial Cleanup Inc. ★<br>Dulac, LA<br>Ph: (800) 436-0883                |   |   |  | (1000') 18"  |  |  |  | (1) Jon Boat   |

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| <b>Morgan City Area</b>  |                              |  |   |                           |          |   |   |                               |
|--|------------------------------|--|---|---------------------------|----------|---|---|-------------------------------|
| Industrial Cleanup Inc. ★<br>Morgan City (Berwick), LA<br>Ph: (800) 436-0883 |                              | (1) Rope Mop<br>(1) I-4D Mop Skimmer<br>(1) II-4 Skimmer |   | (1000') 18"<br>(800') 18" | (1) 200' | (1) 41 bbl Tank<br>(2) 500 bbl Frac Tank  | Immediate Response Unit                             | (2) Jon Boats<br>(1) Boat 26' |
| Oil Mop, Inc. ★<br>Abbeville, LA<br>Ph: (800) 645-6671                       |                              |  |   | (1000') 18"               |          |   |   | (1) 115 HP 20'                |
| Oil Mop, Inc. ★<br>Houma, LA<br>Ph: (800) 645-6671                           |                              | (1) Rope Mop<br>(1) I-4D Mop Skimmer                     |   | (10000') 18"              | (1) 200' |   | Immediate Response Unit                             | (2) Jon Boats                 |
| Oil Mop, Inc. ★<br>Intracoastal City, LA<br>Ph: (800) 645-6671               |                              | (1) Rope Mop<br>(1) I-4D Mop Skimmer                     |   | (2000') Shoreline         | (1) 200' | (5) 30 bbl Barge  | Immediate Response Unit                             | (2) Jon Boats                 |
| Oil Mop, Inc. ★<br>Morgan City, LA<br>Ph: (800) 645-6671                     |                              | (4) Rope Mops<br>(1) Disc                                | (2000') 36"   | (15000') 18"              |          | (30) 55 gal Drums<br>(2) 500 bbl Frac Tank<br>(2) 4 bbl Marine Portable Tanks<br>(5) 24 bbl Cutting Tanks | Immediate Response Unit                             | (6) Jon Boats                 |
| Oil Mop, Inc. ★<br>New Iberia, LA<br>Ph: (800) 645-6671                      |                              | (1) II-9 Skimmer System                                  |   | (20000') 18"              |          | (2) Storage Bladders  |   |                               |
| PSC Industrial Services<br>Golden Meadow, LA<br>Ph: (985) 475-7770           |                              | (1) Guzzler  |   | (2500')                   |          | 200 bbl   |   | (1) 16'<br>(2) 14'            |
| PSC Industrial Services<br>Morgan City, LA<br>Ph: (985) 631-3325             |                              | (1) Guzzler  |   | (2200')                   |          | 2750 bbl Portable Storage   |   | (1) 16'<br>(2) 14'            |
| <b>New Orleans Area</b>  |                              |  |   |                           |          |   |   |                               |
| AMPOL ★<br>New Orleans, LA<br>Ph: (800) 482-6765                             | (1) 260' GT<br>(1) MOSS unit | (5) Walosep Skimmers<br>(1) Lamor 2 Cassettes            | Hydraulic Boom Reel<br>1300' Expandi<br>4300<br>720' Expandi<br>300 |                           |          | (2) 2000 gallon Storage Tank  | (1) Helo Spray Bucket<br>(1) 3500 bbl Dracone Barge |                               |

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| New Orleans Area   |           |  |               |   |          |  |                            |   |
|--|-----------|--|---------------|---|----------|--|----------------------------|---|
| Garner Envir. Svcs. ★<br>New Orleans, LA<br>Ph: (504) 254-2444     |           | (2) Weir<br>(1) Disc                         |               | (5000') 18"<br>(200') 9"                            |          | (2) Trailer Loads of Various<br>Sorbent Products   |                            | (4) Jon Boats (16')<br>(1) 20'<br>(1) 30' |
| Grand Isle Shipyards<br>Galliano, LA<br>Ph: (985) 475-5238         |           |  | (1000') 36"   | (5000') 18"<br>(2000') 6-8"                         |          | (50) Bags of Pads<br>(1) Trailer with Various<br>Products  |                            | (2) Jon Boats                             |
| Industrial Cleanup Inc. ★<br>Baton Rouge, LA<br>Ph: (800) 436-0883 |           | Skimmer Barrier                              |               | (2400') 18"   |          | 16,000 gallon  |                            | (3) Jon Boats                             |
| Industrial Cleanup Inc. ★<br>Grand Isle, LA<br>Ph: (800) 436-0883  |           |  |               | (2000') 18"   |          | 1020 bbl Dracones Bladder  |                            | (1) Jon Boat                              |
| Industrial Cleanup Inc. ★<br>Fourchon, LA<br>Ph: (800) 436-0883    |           |  |               | (3200') 42"<br>(1000') 18"                          |          |  |                            |   |
| Industrial Cleanup Inc. ★<br>Venice, LA<br>Ph: (800) 436-0883      |           |  | (2000') 42"   | (1000') 18"   |          | 1020 bbl Dracones Bladder  |                            | (1) Jon Boat                              |
| Industrial Cleanup Inc. ★<br>Westwego, LA<br>Ph: (800) 436-0883    | (9) FRU's | (11) Shallow Water<br>Units                  | (12,000') 42" | (15,000') 18"<br>(2400') 12"                        |          |  |                            | (10) Jon Boats                            |
| Oil Mop, Inc. ★<br>B. Rouge/Port Allen, LA<br>Ph: (800) 645-6671   |           | (1) Rope Mops<br>(1) I-4D Mop Skimmer        |               | (3000') 18" w/Trailer<br>(1000') 18"<br>(5500') 18" | (1) 200' | (30) 55 gal Storage Drums<br>(3) 500 bbl Frac Tanks<br>(2) 41 bbl Marine Portable<br>Tanks<br>(5) 24 bbl Cutting Tanks | Immediate<br>Response Unit | (2) Jon Boats<br>(1) 26' Work Barge       |
| Oil Mop, Inc. ★<br>Belle Chase, LA<br>Ph: (800) 645-6671           |           | (1) I-4D Mop<br>(1) Rope Mop<br>(4) Skimmers |               | (5700') 18"<br>(1000') 18"                          | (1) 200' | (2) 41 bbl Marine Portable<br>Tanks<br>(2) 500 bbl Frac Tanks<br>(5) 24 bbl Cutting Tanks<br>(30) 55 gal Storage Drums | Immediate<br>Response Unit | (2) Jon Boats<br>(1) Work Barge 26'       |
| Oil Oil Mop, Inc. ★<br>Fourchon, LA<br>Ph: (800) 645-6671          |           | (1) Rope Mop<br>(1) I-4D Mop Skimmer         |               | (1000') 18"   | (1) 200' |  | Immediate<br>Response Unit | (2) Jon Boats 15'                         |



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APPENDIX E—RESPONSE EQUIPMENT  
SPINNAKER EXPLORATION COMPANY, L.L.C.

| New Orleans Area  |  |   |            |  |          |          |                            |  |
|---|--|---|------------|--|----------|----------|----------------------------|--|
| Oil Mop, Inc. ★<br>Venice, LA<br>Ph: (800) 645-6671               |  | (1) Rope Mop<br>(1) I-4D Mop Skimmer  |            | (1000') 18"                                | (1) 200' |          | Immediate<br>Response Unit | (2) 16' Jon Boats  |
| PSC Industrial Services ★<br>Reserve, LA<br>Ph: (800) 797-9992    |  | (1) MARCO<br>(4) Pelicans 24"<br>(3) Skim Paks<br>(2) MK-140<br>(2) MK-II40 |            | (500') 18"<br>(23,000') 18"<br>(2000') 24" |          | 500 bbl  |                            | (1) 24'<br>(3) 20'<br>(2) 18'<br>(4) 16'                 |
| PSC Industrial Services ★<br>Venice, LA<br>Ph: (985) 534-2008     |  | (2) Guzzlers<br>(1) 70 bbl Vac Truck  |            | 2500'                                      |          | 1500 bbl |                            | (3) Jon Boats  |
| Mobile Area   |  |   |            |  |          |          |                            |  |
| Rubark Envir. Svcs. Inc.<br>New Orleans, LA<br>Ph: (504) 944-9965 |  | (5) Pump/Skimers 2"<br>(1) Pump/Skimers 3"                                  | (500') 36" | (13,500') 18"<br>(500') 10"                |          | 500 bbl  |                            | (6) 16' Workboat<br>(1) 17' Workboat<br>(2) 20' Workboat |
| PSC Industrial Services<br>Mobile, AL<br>Ph: (800) 797-9992       |  | (2) Pelican 24"   | (1000')    | (3000')                                    |          | 200 bbl  |                            | (2) 18'  |

## SECTION 14—MOBILIZATION AND DEPLOYMENT METHODS

A major consideration during a spill is the organization and direction of the transportation of manpower, equipment and materials used in response operations. Examples of transportation needs are outlined in **FIGURE 14.1**.

- 1) Spinnaker Exploration Company will work with local authorities (state police) in establishing land routes that will expedite the movement of personnel, equipment, materials and supplies to the staging area and waste products from the staging area. See **FIGURE 14.2** for a list of possible Staging Areas.
- 2) Some of the response equipment such as the Model I Fast Response Systems are permit loads. Two drop-deck trailers, one for each tank, and a float-trailer are required. The trucker will obtain the permit. The Model II and III Fast Response Systems do not require a permit, and therefore are better suited for fast response if trucking to a staging area. Currently, five of the Fast Response Systems are trailer mounted for rapid highway response.
- 3) Vessel companies are listed in **APPENDIX F**

CGA equipment is stockpiled in warehouses along the Gulf Coast. The criteria in selecting which CGA warehouse to mobilize equipment from includes location of spill, trajectory, availability of equipment, personnel, vessels, and dock space. Equipment sites closest to the leading edge of the slick will be given first priority. Some of these warehouses are adjacent to docks enabling rapid loadout of the equipment onto vessels. Other equipment must be trucked to a Staging Area for loadout.

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SECTION 14—MOBILIZATION AND DEPLOYMENT METHODS  
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**FIGURE 14.1**  
**TRANSPORTATION METHODS—VESSELS, AIRCRAFT, AND TRUCKING**

| <b>VESSELS</b>             |  |  |
|----------------------------|--|--|
| <b>Transportation Mode</b> | <b>Use</b>   | <b>Special Considerations</b>                                  |
| 1. Utility Boats           | a. Deploy skimmers<br>b. Boat spray system<br>c. Temporary oil storage | Contain 65' deck space and ability to cruise @ 1 knot or less. |
| 2. Crew Boats              | a. Deploy boom   | Size depends on boom dimensions and water depth.               |
| 3. Tug Boats               | a. Carry and position Hoss Barge<br>b. Position storage barges         | (1) 1800 HP tug<br>(2) 1200 HP tugs                            |
| 4. Tank Barges             | a. Haul waste to disposal site   |  |

| <b>AIRCRAFT</b>            |  |  |
|----------------------------|--|--|
| <b>Transportation Mode</b> | <b>Use</b>   | <b>Special Considerations</b>  |
| 1. Helicopters             | a. Spray collectants<br>b. Slick surveillance<br>c. Personnel deployment | Need communication equipment.  |
| 2. Seaplanes               | a. Slick surveillance<br>b. Personnel deployment                         |  |
| 3. Airplane                | a. Dispersant application<br>b. Slick surveillance                       | Has aerial spray capabilities. Needs special navigation and communication equip. on board. |

| <b>TRUCKING</b>            |  |                               |
|----------------------------|--|-------------------------------|
| <b>Transportation Mode</b> | <b>Use</b>   | <b>Special Considerations</b> |
| 1. Flatbed Trucks          | a. Haul equipment to staging area  | May be permit load            |
| 2. Drop Deck Trailers      | a. Haul equipment to staging area  | May be permit load            |
| 3. Tractors                | a. Transport skimmers already mounted on trailers  | May be permit load            |
| 4. Pickup Trucks           | a. Deliver equipment and supplies to staging areas.<br>b. Deliver food and potable water |                               |
| 5. Tank Trucks             | a. Haul waste to disposal site   | Need permit                   |

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**FIGURE 14.2**  
**LIST OF STAGING AREAS – LOUISIANA \***

| LOCATION          | COMPANY NAME               | PHONE          | CRANE  | TRAILER |
|-------------------|----------------------------|----------------|--------|---------|
| Amelia            | ASCO                       | (985) 631-0621 | Yes    | Yes     |
|                   | Baroid Drilling Fluids     | (985) 385-1010 | Yes    | Yes     |
|                   | Berry Brothers             | (985) 384-8770 | Yes    | Yes     |
|                   | Berwick Supply             | (985) 384-5073 | No     | No      |
|                   | M-I Drilling Fluids        | (985) 385-2660 | Yes    | Yes     |
|                   | Star Enterprises           | (985) 384-8894 | Yes    | Access  |
| Cameron           | AMBAR                      | (337) 775-5995 | Yes    | Yes     |
|                   | Baker Hughes               | (337) 775-5125 | Yes    | Yes     |
|                   | Baroid Drilling Fluids     | (337) 775-5512 | Yes    | Yes     |
|                   | Halliburton Services, Inc. | (337) 775-5872 | Access | Yes     |
|                   | M-I Drilling Fluids        | (337) 775-5311 | Yes    | Yes     |
|                   | Tesoro Marine Services     | (337) 569-2611 | Yes    | No      |
| Chenier           | Crain Brothers             | (337) 538-2411 | Yes    | No      |
| Dulac             | Baker Hughes               | (985) 563-4537 | Yes    | Yes     |
|                   | Baroid Drilling Fluids     | (985) 563-4241 | Yes    | Yes     |
|                   | M-I Drilling Fluids        | (985) 563-4413 | Yes    | Yes     |
| Fourchon          | Newpark Environmental      | (985) 396-2755 | Yes    | Yes     |
|                   | ASCO                       | (985) 396-2737 | Yes    | No      |
|                   | Martin Terminal, Inc.      | (985) 396-2701 | Yes    | Yes     |
|                   | ASCO                       | (985) 396-2711 | Yes    | Yes     |
|                   | Baroid Drilling Fluids     | (985) 396-2681 | Yes    | Yes     |
| Fresh Water City  | Baroid Drilling Fluids     | (337) 737-2440 | Yes    | Yes     |
| Golden Meadow     | M-I Drilling Fluids        | (985) 396-2851 | Yes    | Yes     |
| Grand Isle        | MSRC Clean Gulf            | (985) 580-0924 | Access | Yes     |
| Harvey            | BV Industries              | (504) 367-4500 | Yes    | No      |
| Intracoastal City | AMBAR                      | (337) 893-7120 | Yes    | Yes     |
|                   | Baker Hughes               | (337) 893-2772 | Yes    | Yes     |
|                   | Baroid Drilling Fluids     | (337) 893-3536 | Yes    | Yes     |
|                   | Broussard Brothers, Inc.   | (337) 893-5303 | Yes    | Yes     |
|                   | ASCO                       | (337) 893-6084 | Yes    | Yes     |
|                   | M-I Drilling Fluids        | (337) 893-5852 | Yes    | Yes     |
| Lafayette         | M-I Drilling Fluids        | (337) 233-1714 | Yes    | Yes     |
| New Orleans       | Avondale Shipyard          | (504) 436-2121 | Yes    | Yes     |
| Venice            | AMBAR                      | (985) 534-9575 | Yes    | No      |
|                   | Baker Hughes               | (985) 534-2379 | Yes    | Yes     |
|                   | Baroid Drilling Fluids #2  | (985) 534-2021 | Yes    | Yes     |
|                   | Halliburton Services, Inc. | (985) 534-2386 | Yes    | Yes     |
|                   | M-I Drilling Fluids        | (985) 534-7422 | Yes    | Yes     |

\* Note: The following website may be helpful in finding boat launches. Louisiana Oil Spill Coordinator's Office, Boat Launch & Lift Locator: <http://lamarinas.losco.lsu.edu>

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**FIGURE 14.2**  
**LIST OF STAGING AREAS – TEXAS**

| LOCATION       | COMPANY NAME               | PHONE          | CRANE  | TRAILER |
|----------------|----------------------------|----------------|--------|---------|
| Aransas Pass   | Halliburton Services, Inc. | (361) 758-0273 | Access | Yes     |
| Corpus Christi | Halliburton Services, Inc. | (361) 888-8153 | Access | Yes     |
| Freeport       | Baker Hughes               | (979) 233-6748 | Yes    | Yes     |
|                | Baroid Docks               | (979) 233-5281 | Yes    | Yes     |
|                | Offshore Oil Services      | (979) 233-1851 | Yes    | Yes     |
|                | Tesoro Marine Services     | (979) 233-0176 | Yes    | Yes     |
| Galveston      | AMBAR                      | (409) 744-7109 | Yes    | Yes     |
|                | Halliburton Services, Inc. | (409) 740-0866 | No     | No      |
|                | Tesoro Marine Services     | (409) 744-7159 | Yes    | Yes     |
|                | Tesoro Marine Services     | (409) 744-7126 | Yes    | No      |
|                | Tesoro Marine Services     | (409) 744-3282 | Yes    | Yes     |
| Harbor Island  | AMBAR                      | (361) 758-2252 | Yes    | Yes     |
|                | Baker Hughes               | (361) 758-0296 | Yes    | Yes     |
|                | Brown & Root               | (361) 758-2554 | Yes    | Yes     |
| Port Aransas   | Tesoro Marine Services     | (361) 758-0296 | Yes    | Yes     |
| Port O'Connor  | Baroid Docks               | (361) 983-2691 | Yes    | Yes     |
|                | Tesoro Marine Services     | (361) 983-2631 | Yes    | Yes     |
| Sabine Pass    | ELI                        | (409) 971-2183 | Yes    | No      |
|                | ASCO                       | (409) 971-2521 | Yes    | Yes     |
|                | Sabine Offshore Services   | (409) 971-2377 | Yes    | No      |
|                | Tesoro Marine Services     | (409) 971-2144 | Access | Yes     |

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SECTION 16—OIL AND DEBRIS DISPOSAL PROCEDURES  
SPINNAKER EXPLORATION COMPANY, L.L.C.

**FIGURE 16.2**

**Oil/Water/Debris Separation Strategies**

The different types of wastes generated during response operations require different disposal methods. Waste shall be separated by material type for temporary storage prior to transport. The following table lists some of the options available for separating oily wastes into liquid and solid components. The table also depicts methods that may be employed to separate free and/or emulsified water from the oily liquid waste.

| TYPE OF MATERIAL                                    | SEPARATION METHODS  |
|---|---|
| <b>(1) LIQUIDS</b>                                  |   |
| Non-emulsified oils                                 | Gravity separation of free water  |
| Emulsified oils                                     | Emulsion broken to release water by: <ul style="list-style-type: none"> <li>• heat treatment</li> <li>• emulsion breaking chemicals</li> <li>• centrifuge</li> <li>• filter/belt press</li> </ul>   |
| <b>(2) SOLIDS</b>                                   |   |
| Oil mixed with sand                                 | <ul style="list-style-type: none"> <li>• Collection of liquid oil leaching from sand during temporary storage</li> <li>• Extraction of oil from sand by washing with water or solvent</li> <li>• Mechanical sand cleaner</li> <li>• Removal of solid oils by sieving</li> </ul>     |
| Oil mixed with cobbles, pebbles or shingle          | <ul style="list-style-type: none"> <li>• Screening</li> <li>• Collection of liquid oil leaching from beach material during temporary storage</li> <li>• Mechanical sand/gravel cleaner</li> <li>• Extraction of oil from beach material by washing with water or solvent</li> </ul> |
| Oil mixed with wood, plastics, seaweed and sorbents | <ul style="list-style-type: none"> <li>• Screening</li> <li>• Collection of liquid oil leaching from debris during temporary storage</li> <li>• Flushing of oil from debris with water</li> </ul>   |
| Tar balls   | Separation from sand by sieving   |

*ATTACHMENT F-3*

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SPINNAKER EXPLORATION COMPANY, L.L.C.

**FIGURE 16.3**  
**TEMPORARY STORAGE METHODS**

| Container            | On-shore | Off-shore | Solids | Liquids | Notes   |
|----------------------|----------|-----------|--------|---------|---|
| Barrels              | ✓        | ✓         | ✓      | ✓       | May require handling devices.   |
| Tank Trucks          | ✓        |           |        | ✓       | Consider road access onshore. Barge-mounted offshore.                             |
| Dump/Flat Bed Trucks | ✓        |           | ✓      |         | Require impermeable liner and cover. Consider flammability of vapors at mufflers. |
| Barges               |          | ✓         | ✓      | ✓       | Liquids only in tanks. Consider venting of tanks.                                 |
| Oil Storage Tanks    | ✓        | ✓         |        | ✓       | Consider problems of large volumes of water in oil.                               |
| Bladders             | ✓        | ✓         |        | ✓       | May require special hoses or pumps for oil transfer.                              |
| Pits                 | ✓        |           | ✓      | ✓       | Liner(s) required.  |
| Roll-off Bins        | ✓        |           | ✓      |         | Require impermeable liner and cover.  |
| Mud Tanks            | ✓        | ✓         | ✓      | ✓       | 500 gallon - 500 Bbls   |
| Frac Tanks           | ✓        | ✓         | ✓      | ✓       | Portable, can be deployed anywhere.   |

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**FIGURE 16.4**  
**WASTE DISPOSAL SITES**

| STATE | WASTE SITE                     | TYPE OF OPERATION   | WASTES ACCEPTED                          | SITE LOCATION   | PHONE NUMBER   |
|-------|--------------------------------|---------------------|--|-----------------|----------------|
| AL    | ETT                            | Waste Treatment     | Drilling muds/cuttings                   | Mobile, AL      | (334) 443-6324 |
| AL    | Mitchell Steel Drum Company    | Drum Recycler       | Empty, drip dried drums                  | Saraland, AL    | (334) 675-3786 |
| AL    | Timberlands (BFI, Inc.)        | Landfill            | Industrial wastes                        | Brewton, AL     | (334) 665-7246 |
| LA    | Allwaste Crude Oil Reclamation | Reclaimer/SWDW      | Waste crude oil, E&P waste fluids        | Jeanerette, LA  | (337) 276-5163 |
| LA    | Chemical Waste Management      | Landfill            | Hazardous waste                          | Carlyss, LA     | (800) 673-5541 |
| LA    | Coastal Chemical               | Glycol Recycler     | Gycols, amines                           | Abbeville, LA   | (337) 898-0001 |
| LA    | Guillory Tank                  | Salt Water Disposal | E&P waste fluids                         | Richard, LA     | (800) 252-5563 |
| LA    | Haller Ent.                    | Injection Wells     | E&P waste & non-hazardous fluids         | Pierre Part, LA | (985) 252-9840 |
| LA    | Houma SWD                      | Salt Water Disposal | E&P waste fluids                         | Houma, LA       | (985) 851-0643 |
| LA    | Int. Petroleum Co.             | Reclaimer           | Waste refined and crude oil              | New Orleans, LA | (504) 254-9021 |
| LA    | Louisiana Tank                 | Salt Water Disposal | E&P waste fluids                         | Bell City, LA   | (337) 436-1000 |
| LA    | U. S. Liquids                  | Land Treatment/SWDW | All E&P waste                            | Mermentau, LA   | (337) 824-8588 |
| LA    | Woodside Landfill              | Landfill            | Industrial waste                         | Walker, LA      | (800) 673-5541 |
| TX    | Chemical Waste Management      | Incinerator         | Hazardous waste                          | Port Arthur, TX | (800) 673-5541 |
| TX    | Newpark Environmental Servs.   | Waste Treatment     | All                                      | Port Arthur, TX | (409) 963-3509 |
| TX    | Procycle                       | Industrial Cleaning | Oily rags, gloves, filters, booms & pads | Springtown, TX  | (800) 628-1445 |
| TX    | Safety Kleen                   | Fuels Blending      | Hazardous waste                          | Denton, TX      | (940) 483-5200 |
| TX    | Sinton Land Fill (BFI)         | Land fill           | Industrial wastes                        | Sinton, TX      | (800) 274-0649 |

- NOTES:
- RCRA - Resource Conservation and Recovery Act ("listed" or "characteristic" hazardous waste)
  - E&P waste - exploration and production waste, exempt from RCRA



**EXPLORATION PLAN (EP)  
AIR QUALITY SCREENING CHECKLIST**

OMB Control No. XXX-XXX  
Expiration Date: Pending

|                        |   |
|------------------------|---|
| <b>COMPANY</b>         | Spinnaker Exploration Company, L.L.C.                 |
| <b>AREA</b>            | Mustang Island  |
| <b>BLOCK</b>           | 783   |
| <b>LEASE</b>           | G 22163   |
| <b>PLATFORM</b>        | Jack-up   |
| <b>WELL</b>            | A, B  |
| <b>COMPANY CONTACT</b> | Tom Becnel  |
| <b>TELEPHONE NO.</b>   | 713/356-7534  |
| <b>REMARKS</b>         | Drill & MLA 2 wells. This is not a Gorilla class rig. |

| "Yes" | "No" | Air Quality Screening Questions  |
|-------|------|--|
|       | X    | Is any calculated Total (CT) Emission amount (in tons) associated with your proposed exploration activities more than 90% of the amounts calculated using the following formulas: CT= 3400 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 east of 87.5° W latitude?   |
|       | X    | Do you expect to encounter H <sub>2</sub> S at concentrations greater than 20 ppm?   |
|       | X    | Do you propose to flare or vent natural gas for more than 48 continuous from any proposed well?  |
| X     |      | Do you propose to burn produced hydrocarbon liquids?   |

If ALL questions are answered "No":

Submit only this coversheet with your plan; a full set of spreadsheets is not needed.

If ANY of questions 1 through 7 is answered "Yes":

Prepare and submit a full set of **EP** spreadsheets with your plan.

If question number 8 is answered "Yes":

Prepare and submit a full set of **DOCD** spreadsheets showing the cumulative emissions from both the proposed activities and the existing production platform.

# EMISSIONS 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/mmescf   | 7.6   | 0.593   | 100  | 5.5    | 84    | P42 1.4-1, 14-2, & 14 | 7/98  |
| NG Flares                  | lbs/mmescf   |       | 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/mmescf   |       |         |      | 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 |

## EMISSIONS CALCULATIONS 1ST YEAR

OMB Control No. xxxx-xxxx

Expiration Date: Pending

| COMPANY                    | AREA                           | BLOCK                                       | LEASE     | PLATFORM  | WELL     |      | CONTACT                 |        | PHONE        | REMARKS |        |                |        |        |        |          |
|----------------------------|--------------------------------|---|-----------|-----------|----------|------|-------------------------|--------|--------------|---------|--------|----------------|--------|--------|--------|----------|
| Spinnaker Exploration Corp | Mustang Island                 | 783   | G 22163   | Jack-up   | A, B     |      | Tom Becnel              |        | 713/356-7534 |         |        |                |        |        |        |          |
| 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       | 16000                                       | 772.8     | 18547.20  | 24       | 90   | 11.28                   | 51.74  | 387.67       | 11.63   | 84.58  | 12.18          | 55.87  | 418.68 | 12.56  | 91.35    |
|                            | 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     |
|                            | emer gen/cranes                |   |           |           |          |      |                         |        |              |         |        |                |        |        |        |          |
|                            | AUXILIARY EQUIP<600hp diesel   | 300   | 14.49     | 347.76    | 1        | 13   | 0.66                    | 0.97   | 9.25         | 0.74    | 2.00   | 0.00           | 0.01   | 0.06   | 0.00   | 0.01     |
|                            | VESSELS>600hp diesel(crew)     | 2000  | 96.6      | 2318.40   | 4        | 39   | 1.41                    | 6.47   | 48.46        | 1.45    | 10.57  | 0.11           | 0.50   | 3.78   | 0.11   | 0.82     |
|                            | VESSELS>600hp diesel(supply)   | 2500  | 120.75    | 2898.00   | 4        | 45   | 1.76                    | 8.08   | 60.57        | 1.82    | 13.22  | 0.16           | 0.73   | 5.45   | 0.16   | 1.19     |
| VESSELS>600hp diesel(lugs) | 12600                          | 608.58                                      | 14605.92  | 12        | 2        | 8.88 | 40.74                   | 305.29 | 9.16         | 66.61   | 0.11   | 0.49           | 3.66   | 0.11   | 0.80   |          |
| FACILITY<br>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        | 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     |
|                            | MISC.                          | BPD   | SCF/HR    | COUNT     |          |      |                         |        |              |         |        |                |        |        |        |          |
|                            | TANK-                          | 0   |           |           | 0        | 0    |                         |        |              | 0.00    |        |                |        |        | 0.00   |          |
| DRILLING                   | OIL BURN                       | 300   |           |           | 24       | 2    | 5.25                    | 85.38  | 25.00        | 0.13    | 2.63   | 0.13           | 2.05   | 0.60   | 0.00   | 0.06     |
| WELL TEST                  | GAS FLARE                      |   | 416667    |           | 24       | 2    |                         | 0.25   | 29.75        | 25.13   | 161.88 |                | 0.01   | 0.71   | 0.60   | 3.89     |
| 2005 YEAR TOTAL            |                                |   |           |           |          |      | 29.24                   | 193.62 | 865.98       | 50.05   | 341.48 | 12.69          | 59.66  | 432.95 | 13.56  | 98.12    |
| EXEMPTION<br>CALCULATION   | DISTANCE FROM LAND IN<br>MILES | SPINNAKER WILL NOT USE A GORILLA CLASS RIG. |           |           |          |      |                         |        |              |         |        | 995.67         | 995.67 | 995.67 | 995.67 | 32753.65 |
|                            | 29.9                           |   |           |           |          |      |                         |        |              |         |        |                |        |        |        |          |

## SUMMARY

OMB Control No. xxxx-xxxx

Expiration Date: Pending

| COMPANY         | AREA              | BLOCK  | LEASE   | PLATFORM | WELL     |
|-----------------|-------------------|--------|---------|----------|----------|
| Spinnaker Explo | Mustang Island    | 783    | G 22163 | Jack-up  | A, B     |
| Year            | Emitted Substance |        |         |          |          |
|                 | PM                | SOx    | NOx     | VOC      | CO       |
| 2005            | 12.69             | 59.66  | 432.95  | 13.56    | 98.12    |
| 2006            | 0.00              | 0.00   | 0.00    | 0.00     | 0.00     |
| 2007            | 0.00              | 0.00   | 0.00    | 0.00     | 0.00     |
| 2008            | 0.00              | 0.00   | 0.00    | 0.00     | 0.00     |
| 2009            | 0.00              | 0.00   | 0.00    | 0.00     | 0.00     |
| 2010            | 0.00              | 0.00   | 0.00    | 0.00     | 0.00     |
| 2011            | 0.00              | 0.00   | 0.00    | 0.00     | 0.00     |
| 2012            | 0.00              | 0.00   | 0.00    | 0.00     | 0.00     |
| 2013            | 0.00              | 0.00   | 0.00    | 0.00     | 0.00     |
| 2014            | 0.00              | 0.00   | 0.00    | 0.00     | 0.00     |
| Allowable       | 995.67            | 995.67 | 995.67  | 995.67   | 32753.65 |

## SECTION G

### AIR EMISSIONS

Offshore air emissions related to the proposed activities result mainly from the drilling rig operations, helicopters and service vessels. These emissions occur mainly from combustion or burning of fuels and natural gas, and from venting or evaporation of hydrocarbons. The combustion of fuels occurs primarily on diesel-powered generators, pumps or motors, and from lighter fuel motors. Other air emissions can result from catastrophic events such as oil spills or blowouts.

Primary air pollutants associated with OCS activities are nitrogen oxides, carbon monoxide, sulphur oxides, volatile organic compounds, and suspended particulates.

Included as **Attachment G-1** is the Projected Air Quality Emissions Report prepared in accordance with Appendix G of the Notice to Lessees NTL 2003 G-17 addressing drilling and suspension operations.

## SECTION H

### ENVIRONMENTAL IMPACT ANALYSIS

#### ENVIRONMENTAL IMPACT ANALYSIS

Included in this section, as **Attachment H-1** is the **ENVIRONMENTAL IMPACT ANALYSIS** prepared in accordance with Appendix H of Notice to Lessees NTL 2002-G08.

**Environmental Impact Analysis  
For  
Initial Exploration Plan  
Mustang Island Area Block 783  
OCS-G-22163**



**May 2005**

**(CEI 24012)**

**Environmental Impact Analysis  
For  
Initial Exploration Plan  
Mustang Island Area Block 783  
OCS-G-22163**

**Prepared by:**

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**May 2005**

**(CEI 24012)**



## (A) Impact Producing Factors (IPFs)

The worksheet below was developed by the Minerals Management Service (MMS) and identifies IPFs that could theoretically impact the listed environmental resources. When it was determined that one of the resources may be prone to impact an "x" was placed in the corresponding IPF column and a descriptive explanation is provided. Footnotes detail the applicability of the IPF to the specific resource.

| Environmental Resources                   | Impact Producing Factors (IPFs)  |  |  |  |  |                       |
|---|--|--|--|--|--|-----------------------|
|   | Categories and Examples  |  |  |  |  |                       |
|   | (Refer to a recent GOM OCS Lease Sales EIS for a more complete list of IPFs) |  |  |  |  |                       |
|   | Emissions (air, light, noise, etc.)  | Effluents (muds, cuttings, other discharges to water column or seafloor) | Physical Disturbances to the seafloor (rig or anchor emplacements, etc.) | Wastes sent to shore for treatment or disposal | Accidents (e.g., oil spills, chemical spills, H <sub>2</sub> S releases) | Other IPFs identified |
| <b>Site Specific at Offshore Location</b> |  |  |  |  |  |                       |
| Designated Topographic Features           |  | (1)  | (1)  |  | (1)  |                       |
| Pinnacle Trend Area Live Bottoms          |  | (2)  | (2)  |  | (2)  |                       |
| Eastern Gulf Live Bottoms                 |  | (3)  | (3)  |  | (3)  |                       |
| Chemosynthetic Communities                |  |  | (4)  |  |  |                       |
| Water Quality                             |  | X  |  |  | X  |                       |
| Fisheries                                 |  | X  |  |  | X  |                       |
| Marine Mammals                            | (8)  | X  |  | X  | (8)  |                       |
| Sea Turtles                               | X (8)  |  |  | X  | (8)  |                       |
| Air Quality                               | X (9)  |  |  |  |  |                       |
| Shipwreck Sites (known or potential)      |  |  | (7)  |  |  |                       |
| Prehistoric Archaeological Sites          |  |  | (7)  |  |  |                       |
| <b>Vicinity of Offshore Location</b>      |  |  |  |  |  |                       |
| Essential Fish Habitat                    |  | X  |  |  | X (6)  |                       |
| Marine and Pelagic Birds                  |  |  |  |  | X  |                       |
| Public Health and Safety                  |  |  |  |  | (5)  |                       |
| <b>Coastal and Onshore</b>                |  |  |  |  |  |                       |
| Beaches                                   |  |  |  |  | X (6)  |                       |
| Wetlands                                  |  |  |  |  | X (6)  |                       |
| Shore Birds and Coastal Nesting Birds     |  |  |  |  | X (6)  |                       |
| Coastal Wildlife Refuges                  |  |  |  |  | X  |                       |
| Wilderness Areas                          |  |  |  |  |  |                       |
| <b>Other Resources Identified</b>         |  |  |  |  |  |                       |
|   |  |  |  |  |  |                       |
|   |  |  |  |  |  |                       |

*Footnotes for the 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:*
  - a. *4-mile zone of the Flower Gardens Banks, or the 3-mile zone of Stetson Bank;*
  - b. *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;*
  - c. *Essential Fish Habitat (EFH) criteria of 500 ft from any no-activity zone; or*
  - d. *Proximity of any submarine bank (500 ft buffer zone) with relief greater than 2 meters that is not protected by the Topographic Features Stipulation attached to an OCS lease.*
2. *Activities with any bottom disturbance within an OCS lease block protected through the Live Bottom (Pinnacle Trend) Stipulation attached to an OCS lease.*
3. *Activities within any Eastern Gulf OCS block where seafloor habitats are protected by the Live Bottom (Low-relief) Stipulation attached to an OCS lease.*
4. *Activities on blocks designated by the MMS as being in water depths 400 meters or greater.*
5. *Exploration or production activities where H<sub>2</sub>S concentrations greater than 500 ppm might be encountered.*
6. *All activities that could result in an accidental spill of produced liquid hydrocarbons or diesel fuel that is determined to impact these environmental resources. If the proposed action is located a sufficient distance from a resource that no impact would occur, the EIA will note that in a sentence or two.*
7. *All activities that involve seafloor disturbances, including anchor placement, 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 the planned activity will occur. If the proposed activities are located at sufficient distance from a shipwreck or prehistoric site that no impact would occur, the EIA will note that in a sentence or two.*
8. *All activities that are determined to possibly 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 Offshore Location**

#### *Designated Topographic Features*

There are no impacts from any of the IPFs (including emissions, effluents, physical disturbances to the seafloor, shore bound wastes and accidents) expected on Designated Topographic Features due to site-specific activities. The nearest topographic feature is the North Hospital Bank located within High Island Block A117. There are also no submarine banks within Mustang Island Block 783 that have relief greater than 2 meters.

It is unlikely that an oil spill (surface or sub-surface) would occur due to any of the activities proposed. However, if a spill were to occur it is unlikely that there would be any impact to the sessile biota on the seafloor due to the approximately 160 feet of water depth in this block and the tendency for oil to rise in the water column and disperse. Any sub-sea leak also would not likely impact any banks as the hydrocarbons would be moved away and swept clear of the bank by the natural water flow around the bank. The activities proposed in this plan will be covered by Spinnaker Exploration Company's regional OSRP (refer to Section F which contains the information submitted in accordance with NTL 2002-G08).

#### *Pinnacle Trend Area Live Bottoms*

There are no impacts from any of the IPFs (including emissions, effluents, physical disturbances to the seafloor, shore bound wastes and accidents) expected on pinnacle trend area live bottoms due to site-specific activities. The nearest pinnacle trend live bottom stipulation occurs in Main Pass Area Block 290.

It is unlikely that an oil spill (surface or sub-surface) would occur due to any of the activities proposed. However, if a spill were to occur it is unlikely that there would be any impact to any pinnacle trends due to the distance to Main Pass Block 290 from Mustang Island Block 783. The activities proposed in this plan will be covered by Spinnaker Exploration Company's regional OSRP (refer to Section F which contains the information submitted in accordance with NTL 2002-G08).

#### *Eastern Gulf Live Bottoms*

There are no impacts from any of the IPFs (including emissions, effluents, physical disturbances to the seafloor, shore bound wastes and accidents) expected on eastern gulf live bottoms due to site-specific activities. The nearest live bottom stipulation occurs in Main Pass Area Block 290.

It is unlikely that an oil spill (surface or sub-surface) would occur due to any of the activities proposed. However, if a spill were to occur it is unlikely that there would be an impact to any eastern gulf live bottoms because the distance to Main Pass Block 290 is great enough to alleviate impact concerns. The activities proposed in this plan will be covered by Spinnaker Exploration Company's regional OSRP (refer to Section F which contains the information submitted in accordance with NTL 2002-G08).

### *Chemosynthetic Communities*

The proposed activities for Mustang Island Block 783 occur at a water depth of 152 to 168 feet thereby eliminating any possibility that Chemosynthetic Communities would occur because they require a water depth of at least 400 meters or 1312 feet. Therefore none of the IPFs (including emissions, effluents, physical disturbances to the seafloor, shore bound wastes and accidents) are expected to impact these communities.

### *Water Quality*

Effluents and accidents could possibly impact the water quality due to the proposed activities for Mustang Island Block 783. The National Pollution Discharge Elimination System (NPDES), specifically Spinnaker Exploration Company's general permit under GMG 290000 issued by the Environmental Protection Agency (EPA) will cover all discharges and the regulations coinciding with this permit will be followed. Therefore, it is unlikely that there will be any impact to the water quality due to operational discharges within Mustang Island Block 783.

It is unlikely that an oil spill (surface or sub-surface) would occur due to any of the activities proposed. However, if a spill were to occur it is unlikely that there would be any long-term impact to water quality. The spill effects to water quality would be temporary as the spilled petroleum product would disperse and break down (organic and microbial degradation), which would remove the oil from the water column or at the very least dilute the constituents to background levels. The activities proposed in this plan will be covered by Spinnaker Exploration Company's regional OSRP (refer to Section F which contains the information submitted in accordance with NTL 2002-G08).

### *Fisheries*

Mustang Island Block 783 is within the limits of the brown shrimp moderate to high productivity area and the major finfish area. These are the only fisheries at the site-specific offshore location that could be impacted by the proposed activities. It is unlikely that any of the following IPFs would have an impact on fisheries within Mustang Island Block 783: emissions, physical disturbances to the seafloor, and shore bound wastes. However, an effluent discharge or an accidental spill has the possibility of causing some impact to the fisheries.

An accidental oil spill or effluent discharge that may occur due to the proposed activities for Mustang Island Block 783 is unlikely. However, if either did occur it would most likely have a sub-lethal effect on the finfish or shellfish in the area because the hydrocarbons can be metabolized and increased exposure can be avoided. The activities proposed in this plan will be covered by Spinnaker Exploration Company's regional OSRP (refer to Section F which contains the information submitted in accordance with NTL 2002-G08).

### *Marine Mammals*

There may be adverse impacts by several IPFs (including vessel traffic, noise, accidental oil spills, and loss of trash or debris) to marine mammals within Mustang Island Block 783 due to the proposed activities. The only lethal effects would be due to ingestion of plastic materials, collision with a vessel or oil spills. These events, if occurring at all, would be very rare. There are also many sublethal effects of IPFs such

as noise and effluent discharge that could have chronic and sporadic effects to individuals within the population or to family groups by increasing stress levels which could cause a general weakening in individuals. This weakening would lead to increased possibilities for infection and make them more susceptible to parasitic infestation both of which might not normally be fatal. These sublethal events are not expected and are considered to be very rare occurrences.

Any disturbance could stress and possibly harm individual marine mammals but it is likely that they would travel to other areas within their home range. Both fatal and sub-fatal incidents are unlikely and are unexpected barring catastrophic events.

### *Sea Turtles*

IPFs that could theoretically impact sea turtles include vessel traffic, noise, shore bound waste and trash losses, and accidental oil spills. These impacts could be as small as a slight stressor to an individual or as severe as to cause fatalities.

Oil spills could cause fatalities due to ingestion of oiled food, oil particles and contact with oil. The Oil Spill Pollution Act of 1990 has response planning techniques and protections in place to alleviate most of these issues. Chance collisions with vessels could occur, however, these are considered very uncommon events, as is the ingestion of plastic trash or waste material. Stress is also possible due to noise from drilling rigs and associated vessels, which could lead to increased susceptibility to disease.

The majority of the IPFs that could occur to sea turtles are not expected to be lethal however there is the possibility of gradual declines in survival and reproductive rates, which would detrimentally effect populations on a larger scale. These population effects are not typical and as stated above the Oil Spill Pollution Act of 1990 has some mitigative measures in place. Any disturbance could stress and possibly harm individual sea turtles but it is likely that they would travel to other areas within their home range. Both fatal and sub-fatal incidents are unlikely and are unexpected barring catastrophic events.

### *Air Quality*

No IPFs at the site-specific location within Mustang Island Block 783 are expected to impact air quality to a degree that would go above acceptable levels. Emissions will be kept within generally acceptable standards, and effluents, physical disturbances to the seafloor, and shore bound wastes are not expected to impact the air quality. In the unlikely event of an accidental oil spill, the air quality may be impacted due to the spill and response activities, however, even then the impacts would be kept to a minimum. Air quality analyses of the proposed activities indicate that the MMS exemption level is not and will not be exceeded.

### *Shipwreck Sites*

There are no known shipwreck sites within Mustang Island Block 783. This area is located within the MMS zone that requires a 50-meter survey grid. The survey of the block in question did not find evidence of any shipwrecks. The nearest shipwreck was the *Regulator* in Mustang Island Area block 762. Therefore, no IPFs, including physical disturbances to the seafloor, would cause any impacts to this environmental resource.

### *Prehistoric Archaeological Sites*

There are no IPFs including physical disturbances to the seafloor from the proposed activities that could cause impacts to known or potential prehistoric archeological sites and the archeological assessment performed by Thales assesses the area as having a poor chance of significant prehistoric cultural resources being present. No sites were found during the survey. Effluents, emissions, shore bound wastes and accidents would not be expected to impact any archaeological sites if they were present.

### **Vicinity of Offshore Location**

#### *Essential Fish Habitat*

Mustang Island Block 783 is within the limits of the brown shrimp moderate to high productivity area and the major finfish area. There are no other designated fisheries near this block, and the oyster leases and blue crab fishing areas to the north, near the coast, would also be at such a distance as to have no possibility for impact. It is unlikely that any of the following IPFs would have an impact on fisheries within Mustang Island Block 783: emissions, physical disturbances to the seafloor, and shore bound wastes. However, an effluent discharge or an accidental spill has the possibility of causing some impact to fisheries and essential fish habitat.

An accidental oil spill or effluent discharge that may occur due to the proposed activities for Mustang Island Block 783 is unlikely. If either did occur it would most likely have a sub-lethal effect on the finfish or shellfish in the area of impact because the hydrocarbons can be metabolized and increased exposure can be avoided. The activities proposed in this plan will be covered by Spinnaker Exploration Company's regional OSRP (refer to Section F which contains the information submitted in accordance with NTL 2002-G08).

#### *Marine and Pelagic Birds*

Most of the IPFs would have no effect on marine and pelagic bird species. Effluents, emissions, physical disturbances to the seafloor and shore bound wastes would not affect any avian species. An accidental oil spill could have a detrimental effect on individual birds that could become oiled and possibly ingest an oil product. It is unlikely that a spill would occur from the proposed activities in Mustang Island Block 783 and if one did occur the activities in this plan would be covered under Spinnaker Exploration Company's regional OSRP (refer to Section F which contains information submitted in accordance with NTL 2002-G08.) which would help to defray some of the possible impacts to marine and pelagic avian species.

#### *Public Health and Safety*

There are no IPFs (including emissions, effluents, physical disturbances to the seafloor, shore bound wastes and accidents) that would cause any harm to public health and safety. In accordance with 30 CFR 250.417(c) and NTL 2002 Appendix C Spinnaker Exploration Company has submitted sufficient information to justify their request that the

proposed activities for Mustang Island Block 783 be classified by the MMS as H2S absent.

## **Coastal and Onshore**

### *Beaches*

With the exception of an oil spill no IPFs are expected to impact any of the beaches in onshore locations. Upon review of OCS EIA/EA MMS 2002-02 publication the historical spill data and trajectory / risk calculations show that there would be a small risk to Kleberg, Nueces, or Aransas Counties. If an oil spill were to occur there would be at the highest a 13/21/22 percent chance (3, 10, and 30 days, respectively) that the spill would impact any beaches on the shore of Kleberg, Nueces, or Aransas Counties, which are over 20 miles away from Mustang Island Block 783.

Due to the distance from shore and the response capabilities that would be implemented it is highly unlikely that if an oil spill did occur it would impact any beaches along the shoreline. The activities proposed in this plan will be covered by Spinnaker Exploration Company's regional OSRP (refer to Section F which contains the information submitted in accordance with NTL 2002-G08).

### *Wetlands*

With the exception of an oil spill no IPFs are expected to impact any of the wetlands in onshore locations. Upon review of OCS EIA/EA MMS 2002-02 publication the historical spill data and trajectory / risk calculations show that there would be a small risk to Kleberg, Nueces, or Aransas Counties. If an oil spill were to occur there would be a 13/21/22 percent chance (3, 10, and 30 days, respectively) that the spill would impact the wetlands of Kleberg, Nueces, or Aransas Counties, which are over 20 miles away from Mustang Island Block 783.

Due to the distance from shore and the response capabilities that would be implemented it is highly unlikely that if an oil spill did occur it would impact any wetland areas along the shoreline. The activities proposed in this plan will be covered by Spinnaker Exploration Company's regional OSRP (refer to Section F which contains the information submitted in accordance with NTL 2002-G08).

### *Shore Birds and Coastal Nesting Birds*

With the exception of an oil spill no IPFs are expected to impact any of the shore birds or coastal nesting birds in onshore locations. Upon review of OCS EIA/EA MMS 2002-02 publication the historical spill data and trajectory / risk calculations show that there would be a small risk to Kleberg, Nueces, or Aransas Counties bird colonies. If an oil spill were to occur there would be a 13/21/22 percent chance (3, 10, and 30 days, respectively) that the spill would impact shore birds, rookeries, or other coastal nesting birds in Kleberg, Nueces, or Aransas Counties, which are over 20 miles away from Mustang Island Block 783.

Due to this distance from shore, the small impact possibility, and the response capabilities that would be implemented it is highly unlikely that if an oil spill did occur it would impact any shore or coastal nesting bird areas along the shoreline. The activities

proposed in this plan will be covered by Spinnaker Exploration Company's regional OSRP (refer to Section F which contains the information submitted in accordance with NTL 2002-G08).

#### *Coastal Wildlife Refuges*

With the exception of an oil spill no IPFs are expected to impact any of the coastal wildlife refuges in onshore locations. Upon review of OCS EIA/EA MMS 2002-02 publication the historical spill data and trajectory / risk calculations show that there would be a small risk to refuges in Kleberg, Nueces, or Aransas Counties. If an oil spill were to occur there would be a 13/21/22 percent chance (3, 10, and 30 days, respectively) that the spill would impact any refuges in Kleberg, Nueces, or Aransas Counties, which are over 20 miles away from Mustang Island Block 783.

Due to this distance from shore, the small impact possibility, and the response capabilities that would be implemented it is highly unlikely that if an oil spill did occur it would impact any coastal wildlife refuges along the shoreline. The activities proposed in this plan will be covered by Spinnaker Exploration Company's regional OSRP (refer to Section F which contains the information submitted in accordance with NTL 2002-G08).

#### *Wilderness Areas*

No IPFs associated with the proposed activities in Mustang Island Block 783 are expected to impact any wilderness areas in onshore locations. The only wilderness areas in Texas, as designated by the U.S. Congress, are Indian Mounds, Turkey Hill, Big Slough, Upland Island, Little Lake Creek and Guadalupe Mountains, all of which are located in Eastern central or Western Texas, hundreds of miles away and land locked.



## **Other Environmental Resources Identified**

It is expected that the proposed activities in Mustang Island Block 783 will have no other environmental resources identified or impacted.

### **(C) Impacts on Mustang Island Block 783 Proposed Activities**

It is expected that the proposed activities in Mustang Island Block 783 will have no impacts on site specific, offshore vicinity, or coastal and onshore environmental conditions. The conditions of the site have been analyzed in order to make this judgment.

### **(D) Alternatives**

Due to the lack of environmental impacts no alternative was considered for the proposed activities in Mustang Island Block 783.

### **(E) Mitigation Measures**

Aside from measures required by regulation no mitigative steps will be taken to avoid, diminish, or eliminate potential impacts on environmental resources.

### **(F) Consultation**

Coastal Environments, Inc. scientists were consulted regarding potential for impacts to environmental resources due to the proposed activities in Mustang Island Block 783.

### **(G) References**

Although not necessarily cited the following were utilized in preparing the Environmental Impact Analysis:

Archaeological and Hazard Survey of Block 783, Mustang Island Area, (OCS-G-22163) for Spinnaker Exploration Company, LLC. April 2004.

Lowery, George H. 1974. The Mammals of Louisiana and its Adjacent Waters. Louisiana State University Press, Baton Rouge, 565 pp.

Schmidly, D.J. 1981. Marine mammals of the southeastern United States Gulf Coast and the Gulf of Mexico. U.S. Fish and Wildlife Service, Washington, D.C. FWS/OBS-80/41. 163 pp.

U.S. Department of the Interior, Fish and Wildlife Service. 1976. Endangered and threatened species of the southeastern United States. Region IV, Atlanta, Georgia (periodically updated).

U.S. Department of the Interior, Minerals Management Service. Gulf of Mexico OCS Oil and Gas Lease Sales: 2003-2007, Central Planning Area Sales 185, 190, 194, and 201; Western Planning Area Sales 187, 192, 196, and 200; Final Environmental Impact Statement, Volume I: Chapters 1-10; Volume II Figures and Tables. OCS EIA/EA MMS 2002-052.

U.S. Department of the Interior, Minerals Management Service, Visual No. 4-1, 1983. Offshore Fisheries. Gulf of Mexico OCS Region, Metairie, Louisiana. Map.

## SECTION I

### COASTAL ZONE CONSISTENCY

#### COASTAL ZONE CONSISTENCY CERTIFICATION


Issues identified in the Texas Coastal Zone Management Program include the following: general coastal use guidelines, levees, linear facilities (pipelines); dredged soil deposition; shoreline modification, surface alterations, hydrologic and sediment transport modifications; waste disposal; uses that result in the alteration of waters draining into coastal waters; oil, gas or other mineral activities; and air and water quality.

The Certificate of Coastal Zone Management Consistency for the State of Texas is enclosed as **Attachment I-1**. A discussion of Texas's Enforceable Policies is included as **Attachments I-2**.

**COASTAL ZONE MANAGEMENT  
CONSISTENCY CERTIFICATION  
INITIAL EXPLORATION PLAN  
MUSTANG ISLAND BLOCK 783  
LEASE OCS-G 22163**

The proposed activities described in this Plan comply with Texas's approved Coastal Zone Management Program and will be conducted in a manner consistent with such Program.

Spinnaker Exploration Company, L.L.C.  
Lessee or Operator

  
Thomas G. Becnel  
Certifying Official

May 24, 2005  
Date

**SECTION I**  
**COASTAL ZONE MANAGEMENT**

**(A) Consistency certification**

See Attachment I-1.

**(B) Other information**

(1) A detailed description of the proposed activity, its associated facilities, the coastal effects and comprehensive data and information sufficient to support the consistency certification is provided in the EP.

(2) Information specifically identified in the State's management program as required data and information has been provided in the EP.

(3) An evaluation that includes a set of findings, relating the coastal effects of the proposed activities to Texas' relevant enforceable policies of the State's management program. The State of Texas has provided to MMS a list of enforceable policies.

The following assurance of compliance with existing Federal and State laws, regulations and resultant enforceable program policies in Texas's CZMP is provided:

*The proposed activity will be carried out and completed with the guarantee that: The best available and safest technologies will be used throughout the project. These include meeting all applicable requirements for equipment types, general project layout, safety systems, and equipment and monitoring systems. All operations will be covered by an approved oil spill response plan. All applicable Federal, State and local requirements regarding air emissions and water quality and discharge for the proposed activities, as well as any other permit conditions, will be complied with.*

**Texas Coastal Zone Management Program**

**Category 2: Construction, Operation and Maintenance of Oil and Gas Exploration and Production Facilities**

*The proposed facility is located approximately 29.9 miles from the Texas coast line; therefore, no impact to Texas' coastal zone is expected.*

**Category 3 Discharges of Wastewater and Disposal of Waste from Oil and Gas Exploration and Production Activities**

*The discharge of wastewater and disposal of waste from the proposed activities will not occur within the coastal zone of Texas; therefore, no impact to Texas's coastal zone is expected.*

**Category 4 Construction and Operation of Solid Waste Treatment, Storage, and Disposal Facilities**

*No solid waste treatment, storage or disposal facilities are proposed as a part of this plan. Therefore, no impacts to Texas' coastal zone are expected.*

**Category 5 Prevention, Response, and Remediation of Oil Spills**

*As described in the EP, pollution prevention has been considered in the design of the proposed facilities and in developing the operating plans. Further, the proposed activities will be covered under a Regional Oil Spill Response Plan. The proposed activities are located approximately 29.9 miles from the Texas coast line; therefore, no impacts to Texas coastal zone are expected.*

**Category 6 Discharge of Municipal and Industrial Waster Water to Coastal Waters**

*No discharges from the proposed activities will occur in coastal waters; therefore, no impacts to Texas's coastal zone are expected.*

**Category 8 Development in Critical Areas**

*None of the proposed activities occur in critical areas; therefore no impacts to Texas's coastal zone are expected.*

**Category 9 Construction of Waterfront Facilities and Other Structures on Submerged lands**

*The proposed activities do not include the construction of waterfront facilities or other structures on submerged lands in the coastal zone; therefore, no impacts to Texas' coastal zone are expected.*

**Category 10 Dredging and Dredged Material Disposal and Placement**

*The proposed activities do not include any dredging activities; therefore, no impacts to Texas' coastal zone are expected.*

**Category 11 Construction in the Beach / Dune System**

*The proposed activities do not include any construction in the beach/dune system; therefore, no impacts to Texas' coastal zone are expected.*

**Category 15 Alteration of Coastal Historic Areas**

*The proposed activities do not include any alteration or disturbance of a coastal historic area; therefore, not impacts to Texas' coastal zone are expected.*

**Category 16 Transportation**

*No transportation projects within the coastal zone are proposed; therefore, no impacts to Texas' costal zone are expected.*

**Category 17 Emission of Air Pollutants**

*The impacts from the emission of air pollutants have been evaluated in the EP. The proposed activities occur approximately 29.9 miles from the coastline. All of the emissions are within the exemption level established by MMS. Therefore, no impacts to Texas' coastal zone are expected.*

**Category 18 Appropriations of Water**

*The proposed activities do not include the diversion or impoundment of state water's; therefore, no impacts to Texas' coastal zone are expected.*

**Category 20 Marine Fishery Management**

*The proposed activities are located approximately 29.9 miles from the coast line and are not expected to have any affect on fishery management within coastal waters. Therefore, no impacts to Texas' coastal zone are expected.*

**Category 22 Administrative Policies**

*Information has been provided for the agency to make an informed decision on the proposed action.*

## SECTION J

### PLAN INFORMATION FORM

Included in this section as **Attachment J-1** is the Plan Information Form prepared in accordance with Appendix J of the Notice of Lessees NTL 2000-G10.

Included as **Attachment J-2**, is the Bathymetry Map.

**OCS PLAN INFORMATION FORM**

**General Information**

|  |   |   |   |
|--|---|---|---|
| Type of OCS Plan:  | <input checked="" type="checkbox"/> Exploration Plan (EP)   | Development Operations Coordination Document (DOCD) |   |
| Company Name: <b>Spinnaker Exploration Company, L.L.C.</b> |   | MMS Operator Number: <b>02169</b>                   |   |
| Address: <b>1200 Smith Street, Suite 800</b>               |   | Contact Person: <b>Tom Becnel</b>                   |   |
| <b>Houston, Texas 77002</b>                                |   | Phone Number: <b>713-356-7534</b>                   |   |
|  |   | E-Mail Address: <b>tbecnel@spinexp.com</b>          |   |
| Lease(s): <b>G 22163</b>                                   | Area: <b>MU</b>   | Block(s): <b>783</b>                                | Project Name (If Applicable):                 |
| Objective(s):  | <input type="checkbox"/> Oil <input checked="" type="checkbox"/> Gas <input type="checkbox"/> Sulphur <input type="checkbox"/> Salt | Onshore Base: <b>Harbor Island</b>                  | Distance to Closest Land (Miles): <b>29.9</b> |

**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 (for more than 48 hours)                       | <input type="checkbox"/> Installation of production facilities                               |
| <input type="checkbox"/> Installation of caisson or platform as well protection structure | <input type="checkbox"/> Installation of satellite structure                                 |
| <input type="checkbox"/> Installation of subsea wellheads and/or manifolds                | <input type="checkbox"/> Commence production   |
| <input type="checkbox"/> Installation of lease term pipelines                             | <input checked="" type="checkbox"/> Other (Specify and describe) <b>Net Guard &amp; Buoy</b> |

|   |     |  |
|---|-----|--|
| Have you submitted or do you plan to submit a Conservation Information Document to accompany this plan?     | Yes | <input checked="" type="checkbox"/> No |
| Do you propose to use new or unusual technology to conduct your activities?                                 | Yes | <input checked="" type="checkbox"/> No |
| Do you propose any facility that will serve as a host facility for deepwater subsea development?            | Yes | <input checked="" type="checkbox"/> No |
| Do you propose any activities that may disturb an MMS-designated high-probability archaeological area?      | Yes | <input checked="" type="checkbox"/> No |
| Have all of the surface locations of your proposed activities been previously reviewed and approved by MMS? | Yes | <input checked="" type="checkbox"/> No |

**Tentative Schedule of Proposed Activities**

| Proposed Activity   | Start Date      | End Date        | No. of Days |
|---|-----------------|-----------------|-------------|
| <b>Drill &amp; MLA &amp; install net guards and buoys over wells 'A' and 'B'.</b> | <b>20050715</b> | <b>20051012</b> | <b>90</b>   |
|   |                 |                 |             |
|   |                 |                 |             |
|   |                 |                 |             |
|   |                 |                 |             |
|   |                 |                 |             |
|   |                 |                 |             |

**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 |
| Drilling Rig Name (If Known):               |   | <input type="checkbox"/> Spar            | <input type="checkbox"/> Other (Attach Description) |

**Description of Lease Term Pipelines**

| From (Facility/Area/Block) | To (Facility/Area/Block) | Diameter (Inches) | Length (Feet) |
|----------------------------|--------------------------|-------------------|---------------|
| <b>NA</b>                  |                          |                   |               |
|                            |                          |                   |               |
|                            |                          |                   |               |

**OCS PLAN INFORMATION FORM (CONTINUED)**  
**Include one copy of this page for each proposed well/structure**

| Proposed Well/Structure Location   |                               |                         |                                  |                                |  |
|--|-------------------------------|-------------------------|----------------------------------|--------------------------------|--|
| Well or Structure Name/Number (If renaming well or structure, reference previous name):<br><b>A</b>  |                               |                         |                                  |                                | Subsea Completion:   |
| Anchor Radius (if applicable) in feet: <b>NA</b>   |                               |                         |                                  |                                | Yes <input type="checkbox"/> X <input checked="" type="checkbox"/> No <input type="checkbox"/> |
|  | Surface Location              |                         | Bottom-Hole Location (For Wells) |                                |  |
| Lease No.  | <b>OCS G 22163</b>            |                         | <b>OCS G 22163</b>               |                                |  |
| Area Name  | <b>Mustang Island</b>         |                         | <b>Mustang Island</b>            |                                |  |
| Block No.  | <b>783</b>                    |                         | <b>783</b>                       |                                |  |
| Blockline Departures (in feet)   | N/S Departure <b>500 FNL</b>  |                         | N/S Departure:                   |                                |  |
|  | E/W Departure: <b>330 FEL</b> |                         | E/W Departure:                   |                                |  |
| Lambert X-Y coordinates  | X: <b>2,616,845.32</b>        |                         | X:                               |                                |  |
|  | Y: <b>729,049.75</b>          |                         | Y:                               |                                |  |
| Latitude/Longitude   | Latitude <b>27-39-34.533</b>  |                         | Latitude                         |                                |  |
|  | Longitude <b>96-35-39.777</b> |                         | Longitude                        |                                |  |
| TVD (Feet):  |                               | MD (Feet): <b>10466</b> |                                  | Water Depth (Feet): <b>160</b> |  |
| Anchor Locations for Drilling Rig or Construction Barge (If anchor radius supplied above, not necessary)   |                               |                         |                                  |                                |  |
| Anchor Name or No.   | Area                          | Block                   | X Coordinate                     | Y Coordinate                   | Length of Anchor Chain on Seafloor   |
| NA   |                               |                         |                                  |                                |  |
|  |                               |                         |                                  |                                |  |
|  |                               |                         |                                  |                                |  |
|  |                               |                         |                                  |                                |  |
|  |                               |                         |                                  |                                |  |
|  |                               |                         |                                  |                                |  |
|  |                               |                         |                                  |                                |  |
|  |                               |                         |                                  |                                |  |
| <p><b>Paperwork Reduction Act of 1995 Statement:</b> The Paperwork Reduction Act of 1995 (44 U.S.C. Chapter 35) requires us to inform you that MMS collects this information as part of an applicant's Exploration Plan or Development Operations Coordination Document submitted for MMS approval. We use the information to facilitate our review and data entry for OCS plans. We will protect proprietary data according to the Freedom of Information Act and 30 CFR 250.196. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid Office of Management and Budget Control Number. The use of this form is voluntary. The public reporting burden for this form is included in the burden for preparing Exploration Plans and Development Operations Coordination Documents. We estimate that burden to average 580 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to the Information Collection Clearance Officer, Mail Stop 4230, Minerals Management Service, 1849 C Street, N.W., Washington, DC 20240.</p> |                               |                         |                                  |                                |  |

**MMS** Form MMS-137 (August 2003)

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**OCS PLAN INFORMATION FORM (CONTINUED)**  
**Include one copy of this page for each proposed well/structure**

**Proposed Well/Structure Location**

|   |                         |   |                         |
|---|-------------------------|---|-------------------------|
| Well or Structure Name/Number (If renaming well or structure, reference previous name):<br><b>B</b> |                         | Subsea Completion:                      |                         |
| Anchor Radius (if applicable) in feet: NA   |                         | Yes                                     | X No                    |
|   | <b>Surface Location</b> | <b>Bottom-Hole Location (For Wells)</b> |                         |
| Lease No.   | OCS G 22163             | OCS G 22163                             |                         |
| Area Name   | Mustang Island          | Mustang Island                          |                         |
| Block No.   | 783                     | 783                                     |                         |
| Blockline Departures (in feet)  | N/S Departure: 2500 FNL | N/S Departure:                          |                         |
|   | E/W Departure: 100 FEL  | E/W Departure:                          |                         |
| Lambert X-Y coordinates   | X: 2,617,075.32         | X:                                      |                         |
|   | Y: 727,049.75           | Y:                                      |                         |
| Latitude/ Longitude   | Latitude: 27-39-14.695  | Latitude:                               |                         |
|   | Longitude: 96-35-37.555 | Longitude:                              |                         |
|   | TVD (Feet):             | MD (Feet): 9912                         | Water Depth (Feet): 162 |

**Anchor Locations for Drilling Rig or Construction Barge (If anchor radius supplied above, not necessary)**

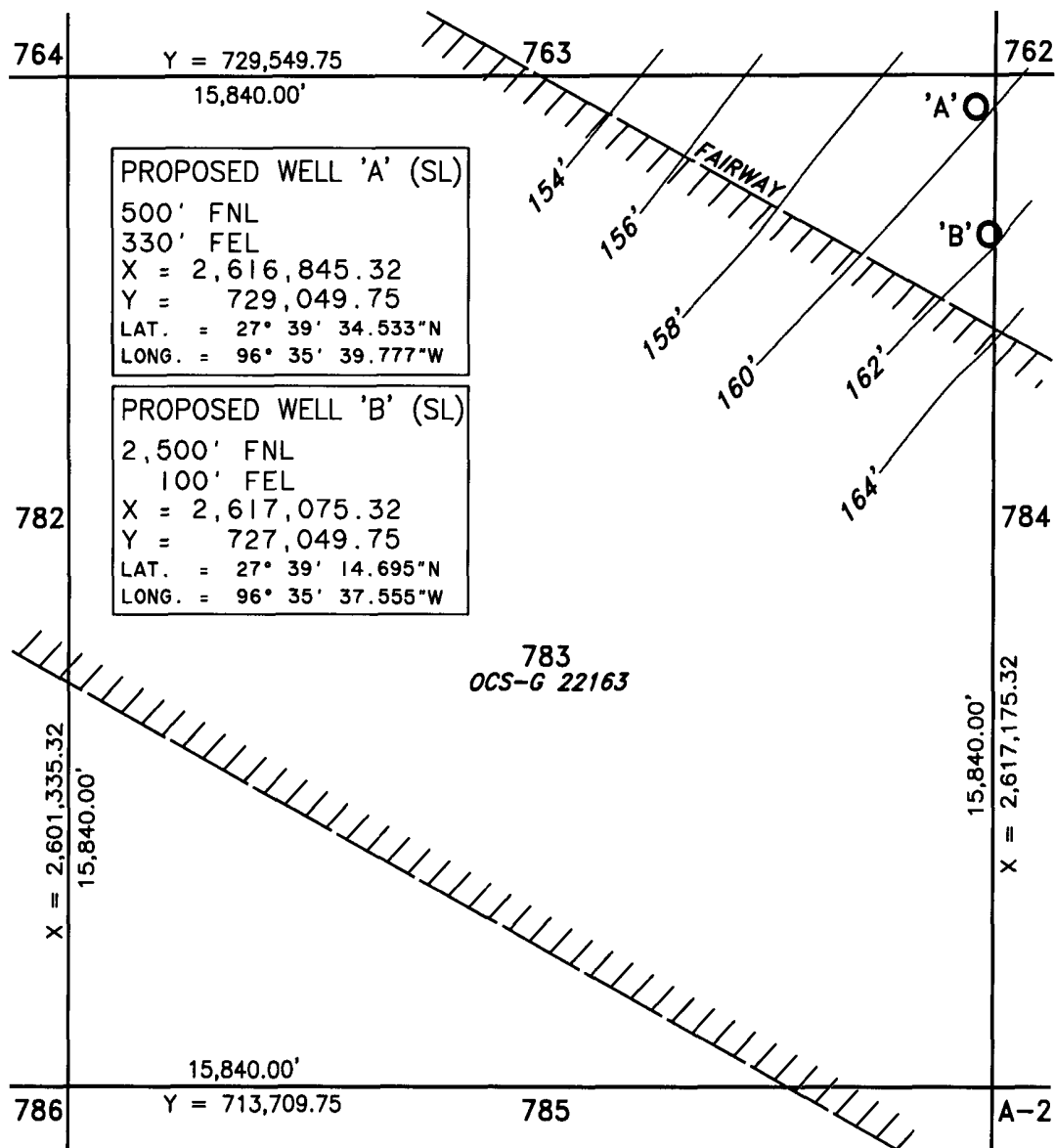
| Anchor Name or No. | Area | Block | X Coordinate | Y Coordinate | Length of Anchor Chain on Seafloor |
|--------------------|------|-------|--------------|--------------|------------------------------------|
| NA                 |      |       |              |              |                                    |
|                    |      |       |              |              |                                    |
|                    |      |       |              |              |                                    |
|                    |      |       |              |              |                                    |
|                    |      |       |              |              |                                    |
|                    |      |       |              |              |                                    |
|                    |      |       |              |              |                                    |
|                    |      |       |              |              |                                    |

**PUBLIC  
INFORMATION**

**Paperwork Reduction Act of 1995 Statement:** The Paperwork Reduction Act of 1995 (44 U.S.C. Chapter 35) requires us to inform you that MMS collects this information as part of an applicant's Exploration Plan or Development Operations Coordination Document submitted for MMS approval. We use the information to facilitate our review and data entry for OCS plans. We will protect proprietary data according to the Freedom of Information Act and 30 CFR 250.196. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid Office of Management and Budget Control Number. The use of this form is voluntary. The public reporting burden for this form is included in the burden for preparing Exploration Plans and Development Operations Coordination Documents. We estimate that burden to average 580 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to the Information Collection Clearance Officer, Mail Stop 4230, Minerals Management Service, 1849 C Street, N.W., Washington, DC 20240.

**MMS** Form MMS-137 (August 2003)

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1,500 0 1,500 3,000  
SCALE IN FEET

|             |             |
|-------------|-------------|
| DATUM:      | NAD 27      |
| SPHEROID:   | CLARKE 1866 |
| PROJECTION: | LAMBERT     |
| ZONE:       | TEXAS SOUTH |

**PUBLIC  
INFORMATION**

SURVEY PERFORMED BY K.C. OFFSHORE IN OCTOBER, 1993

# GEOPHYSICAL SURVEY

## BATHYMETRY

BLOCK 783  
MUSTANG ISLAND AREA

GULF OF MEXICO



SPINNAKER EXPLORATION COMPANY, L.L.C.



TESLA OFFSHORE, LLC

36499 Perkins Road  
Prairieville, Louisiana 70769  
Tel: 225-673-2163  
Fax: 225-744-3116

|           |      |          |                 |                      |
|-----------|------|----------|-----------------|----------------------|
| PREP. MWG | INT. | CAD MWG  | APP. JSL        | FILE NO. 05-170SMBAT |
| CHK. JSL  | CHK. | CHK. JSL | DATE 05/19/2005 |                      |