

UNITED STATES GOVERNMENT  
MEMORANDUM

August 6, 2003

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

Subject: Public Information copy of plan  
Control # - N-07851  
Type - Initial Development Operations Coordinations Document  
Lease(s) - OCS-G21077 Block - 312 East Cameron Area  
Operator - Spinnaker Exploration Company, L.L.C.  
Description - Platform A and Wells A001, A002, and A003  
Rig Type - Not Found

Attached is a copy of the subject plan.

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



Michelle Griffitt  
Plan Coordinator

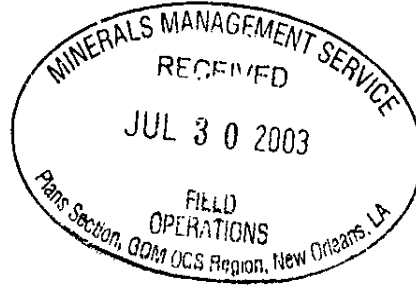
Site Type/Name	Botm Lse/Area/Blk	Surface Location	Surf Lse/Area/Blk
FIXED/A		4049 FSL, 3765 FWL	G21077/EC/312
WELL/A001	G21077/EC/312	4049 FSL, 3765 FWL	G21077/EC/312
WELL/A002	G21077/EC/312	4049 FSL, 3772 FWL	G21077/EC/312
WELL/A003	G21077/EC/312	4042 FSL, 3764 FWL	G21077/EC/312

NOTED - SCHEXNAILDRE

ISS AUG 7 03AM 7:51



July 28, 2003



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

Attention: Mr. Don Howard, MS 5200

Re: **EAST CAMERON AREA  
BLOCK 312, OCS-G 21077  
INITIAL DOCD**

Gentlemen:

In accordance with the guidelines set forth in 30-CFR 250.203, Spinnaker Exploration Company, L.L.C. submitted an Initial DOCD for East Cameron Block 312.

Enclosed you will find nine (9) copies of the subject revisions; 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."

Production is expected to commence on or before **October 1, 2003**.

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.

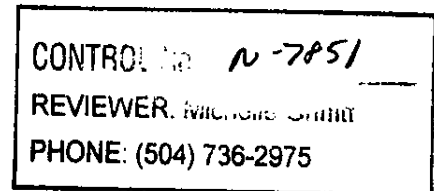
Review and approval of our DOCD at your earliest convenience is greatly appreciated.

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

Sincerely,

Spinnaker Exploration Company, L.L.C.

*Scott Broussard TGB*  
Scott Broussard  
Vice President Drilling & Production



tgb

enclosures

# PUBLIC INFORMATION

**DEVELOPMENT OPERATIONS COORDINATION  
DOCUMENT**

**EAST CAMERON AREA**

**BLOCK 312  
OCS-G 21077**

**OFFSHORE, LOUISIANA**

**JULY 2003**

**INITIAL  
DEVELOPMENT OPERATIONS COORDINATION DOCUMENT**

**EAST CAMERON AREA  
BLOCK 312  
OCS-G 21077**

SECTION A	Contents of Plan
SECTION B	General Information
SECTION C	Geological, Geophysical & H2S Information
SECTION D	Biological 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

Spinnaker Exploration Company, L.L.C. (Spinnaker) acquired Lease OCS-G 21077 at the Central Gulf of Mexico Lease Sale No. 175 held **March 17, 1999**. The subject lease was issued with an effective date of **June 1, 1999**, and primary term ending date of **May 31, 2004**.

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

### OBJECTIVE

**Spinnaker Exploration Company, L.L.C.** (Spinnaker) hereby submits an Initial DOCD for the installation of a 3-pile two (2) deck well-protector platform 'A' at our existing G 21077 Nos. 1, 2 and 3 common location and to produce wells 1, 2 and 3. The surface location was approved under Plan number **N-07704**.

Spinnaker drilled and completed well G 21077 Nos. 1 and 2 and temporarily abandoned well no. 3 at a common surface location and installed a net guard over the wells. A smart buoy was installed in accordance with MMS requirements for submerged structures. We plan to tie back and complete the No. 3 well with a typical jack-up rig following the structure installation. We will flow the wells through two (2) R-O-W pipelines, one 6" oil pipeline and one 4" gas pipeline, to Marathon's EC321 'A' production platform in East Cameron Block 321. Spinnaker will lay a 2" gas-lift R-O-W pipeline from Marathon's EC321 'A' production platform to Spinnaker's EC312 'A' platform for future use.

### SCHEDULE

Install EC312-A Platform .....	September 1, 2003
Install new 2", 4" and 6" R-O-W Pipelines .....	September 1, 2003
Tie-back and Complete Well No. 3 .....	September 10, 2003
Hook-up facilities at HI312-1 .....	September 25, 2003
Commence production .....	October 1, 2003

## **WELL/STRUCTURE LOCATION(S)**

A table depicting the surface location(s) of the proposed activity and corresponding depths is included in Section J of this plan.

## **DESCRIPTION OF HYDROCARBON TRAPPING ELEMENTS (Proprietary Data)**

## **PRODUCTION FACILITIES**

The proposed structure EC312-A will be of minimal design and unmanned. The production facilities at the EC312-A structure will consist of a well manifold, utility gas and vent scrubbers and two (2) departing pipelines. A 6" bulk oil pipeline and 4" bulk gas pipelines will flow full well stream to Marathon's EC321-A platform. We will also install a 2" gas-lift pipeline from Marathon's EC321-A platform to Spinnaker's EC312-A platform. These are all right-of-way pipelines.

Maintenance or repairs that will be necessary to prevent pollution of offshore waters shall be undertaken immediately as needed. The proposed facilities will be designed, installed, and operated in accordance with current regulations, engineering documents incorporated by reference and industry practices in order to ensure protection of personnel, environment and the facilities.

## **DRILLING UNIT**

Well Nos. 1 and 2 (G21077) were drilled and completed under plan **N-07704**. Well No. 3 was drilled and temporarily abandoned under plan **S-6182**. The specifications for the actual drilling vessel and safety equipment were submitted with the applications for Permits to Drill for the G21077 well Nos. 1, 2 and 3. There are no plans to do any development drilling at this time. A typical jack-up rig will be utilized to tie-back and complete the G21077 No. 3 well. The specifications for this rig will be submitted with the Application to Modify the Permit (APM) to tie-back and complete the well.

**PUBLIC  
INFORMATION**

## DESCRIPTION OF STRUCTURES

Spinnaker will install a 3-pile two (2) deck well-protector platform 'A' at the Nos. 1, 2 and 3 common surface location. A drawing of the well-protector platform is given as **Attachment A-1**.

## DESCRIPTION OF PIPELINES

Spinnaker will install 3 right-of-way pipelines. A 6" bulk oil and 4" bulk gas pipelines will be installed from Spinnaker's EC312-A platform and Marathon's EC321-A platform. A 2" gas-lift pipeline will be installed from Marathon's EC321-A platform to Spinnaker's EC312-A platform.

## DESCRIPTION OF VESSELS

**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 – 250'; Fuel – 21,000-25,000 gallons  
Engine Oil – 550-750 Gallons  
Hydraulic Oil – 400-500 Gallons  
Gear Oil – 200-300 Gallons  
BOP Fluid – 200-300 gallons

1 ea. 500 Gallon used oil tank

**Derrick Barge** Length – 350'; 6000 HP; Fuel Capacity – 350,000 gallons  
**Material Tug** Length – 105'; 3600 HP; Fuel Capacity – 60,000 gallons





## **SECTION B**

### **GENERAL INFORMATION**

#### **CONTACT**

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

#### **PROJECT NAME**

None.

#### **NEW OR UNUSUAL TECHNOLOGY**

Spinnaker does not propose the use of any new or unusual technology in the activities provided for in this plan.

#### **PRODUCTION RATES AND LIFE OF RESERVES**

The Initial Production Rates from Spinnaker's East Cameron Block 312 'A' platform are expected to be 5 MMCFPD and 750 BOPD. The projected Reserve Life is 5 (5) years.

#### **BONDING INFORMATION**

In accordance with regulations contained in Title 30 CFR Part 256 and further clarified by Notice to Lessees (NTL 99-G04) pertaining to general lease surety bonds, Spinnaker has on file with the Minerals Management Service a \$3,000,000 Area wide Development Bond.

Additionally, Notice to Lessees (NTL 98-18N) provides clarification on the method MMS utilizes to require additional security to cover full plugging, site clearance and other associated lease liabilities that may be in excess of the federal 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 BASE AND SUPPORT VESSELS

Spinnaker's shore base at Cameron, Louisiana will serve as the onshore support base during the activities planned for East Cameron block 312. This will serve as port of debarkation for supplies and crews. Typical supply and crew boats will be utilized throughout the completion, construction and hook-up operations. Boat and helicopter travel to and from the base will be over the most direct routes. No additional personnel will be required to conduct the proposed completion, construction and hook-up operations.

**East Cameron Block 312** is located approximately **92** miles from the nearest Louisiana shoreline and approximately **100** miles from the onshore support base located in **Cameron, Louisiana**. A Vicinity Plat showing the location of **East Cameron Block 312** relative to the shoreline and onshore base is included as **Attachment B-1**.

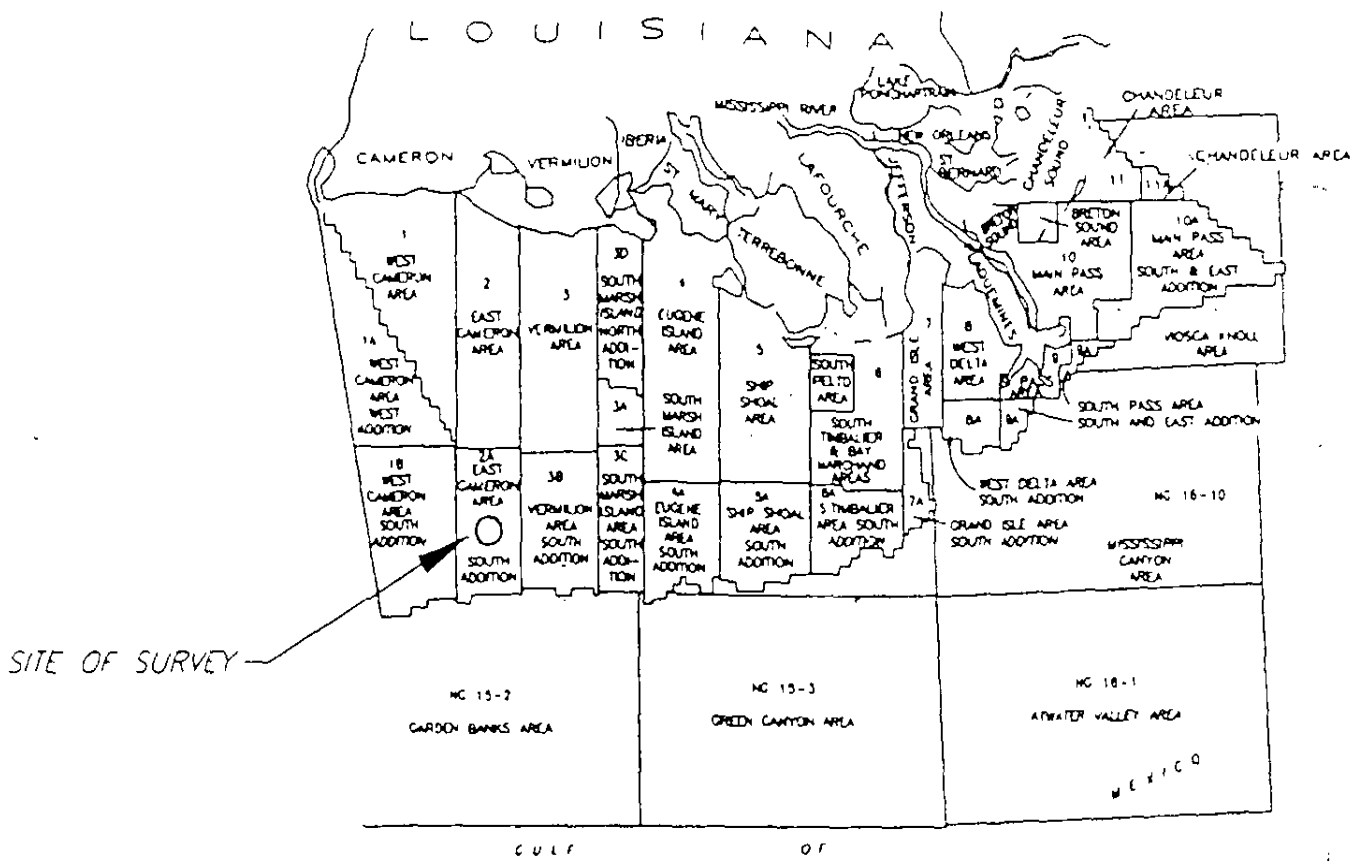
No onshore expansion or construction of our support base is anticipated with respect to the proposed activities.

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. The base will also serve as a loading for tools, equipment and machinery to be delivered to the MODU, crew change and transportation base, and temporary storage for materials and equipment. The facilities typically include outdoor storage, forklift, and crane service, dock, trailer facilities, and parking, as well as 24-hour service, a radio tower with a phone patch.

### FREQUENCY OF TRAVEL

Support Vessel & Aircraft	Construction Operations Trips Per Week	Drilling Operations Trips Per Week	Production Operations Trips Per Week
Crew Boat	5	5	0
Work Boat	3	3	3
Helicopter	1	1	1

Personal vehicles will be the main means of transportation to carry rig personnel from various locations to the Cameron, Louisiana area. They will then be transported to the MOD U by the crew boat. A helicopter will be issued to transport small supplies, and occasionally, personnel. The most practical, direct route permitted by the weather and traffic conditions will be utilized.



VICINITY MAP

INSTRUMENTATION.

- DIFFERENTIAL GPS/SENTINEL
- 24 kHz ECHO SOUNDER
- SIDE SCAN SONAR
- MAGNETOMETER
- 3.5 kHz SUBBOTTOM PROFILER
- HIGH RESOLUTION SEISMIC SYSTEM
- 100' GUN IN. SLEEVE GUN

92 miles from shore  
100 miles from Cameron

**BEST AVAILABLE COPY**

GENERAL NOTES:

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

SURVEY PERFORMED BY K C OFFSHORE, L.L.C. IN JULY, 1999.

ATTACHMENT 13-1

GEOPHYSICAL SURVEY				SPINNAKER EXPLORATION COMPANY, L.L.C.			
SURVEY LOCATION MAP							
BLOCK 312 EAST CAMERON AREA SOUTH ADDITION				KC OFFSHORE, L.L.C. AN EMMETEC COMPANY OFFSHORE			
OFFSHORE LOUISIANA							
36499 PERKINS RD., PRAIRIEVILLE, LOUISIANA 70769							
DRN	DLA	PREP	DLA	CAL	APP	KAC	FILE NO. 11-99-101-01B
CHK	KAC	CHK	KAC	CHK	DATE	8/20/99	PG NO 1 PAGE 2

During the proposed operations, Spinnaker and contractor personnel will be employed on the lift boat conducting the construction operations. During these periods of time, approximately 50 – 75 personnel may be engaged in designated activities. Personnel engaged in onshore operations will be the dispatchers as the per-determined support base, contract personnel for off loading equipment and materials required to support the activities, as well as the personnel needed to transport same to the offshore facility.

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

Dredging and filing 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 Plan.

## **LEASE STIPULATIONS**

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

Minerals Management Service did not invoke any stipulations for Lease OCS-G 21077, East Cameron Block 312.

**Stipulation No.3 - Spinnaker will file notifications with the 59<sup>th</sup> Fighter Wing in New Orleans, Louisiana and the 147<sup>th</sup> Fighter Wing in Houston, Texas with regard to vessel and aircraft traffic in MWA's W-59 and W-147 prior to conducting operations on East Cameron Block 312. The notifications are included as Attachments B-2 and B-3.**



July 29, 2003

147<sup>th</sup> Fighter Wing  
147 FW/CC  
14657 Sneider Street  
Houston, Texas 77034-5586

Attention: **DOV**

Re: **East Cameron Area**  
**Block 312, OCS-G 21077**  
**Initial DOCD**

Gentlemen:

In accordance with the guidelines set forth in Stipulation 2 (c) of the lease agreement for east Cameron Block 312, Spinnaker is notifying you of our estimated vessel and aircraft traffic proposed in the above referenced Development Plan. The proposed frequency and mode of travel is given in the table below:

Support Vessel & Aircraft	Construction Operations Trips Per Week	Drilling Operations Trips Per Week	Production Operations Trips Per Week
Crew Boat	5	5	0
Work Boat	3	3	3
Helicopter	1	1	1

Enclosed is a list of the location(s) where the proposed activity will take place.

Construction operations are expected to commence on or about **September 1, 2003**.

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

Sincerely,

Spinnaker Exploration Company, L.L.C.

  
Scott Broussard  
Vice President Drilling & Production

tgb  
enclosures



July 29, 2003

Naval Air station -- JRB  
Building 285  
New Orleans, LA 70143-0027

Attention: **Military Warning Area W-59**  
**Tsgt. Stacey Vendetti**

Re: **East Cameron Area**  
**Block 312, OCS-G 21077**  
**Initial DOCD**

Gentlemen:

In accordance with the guidelines set forth in Stipulation 2 (c) of the lease agreement for east Cameron Block 312, Spinnaker is notifying you of our estimated vessel and aircraft traffic proposed in the above referenced Development Plan. The proposed frequency and mode of travel is given in the table below:

Support Vessel & Aircraft	Construction Operations Trips Per Week	Drilling Operations Trips Per Week	Production Operations Trips Per Week
Crew Boat	5	5	0
Work Boat	3	3	3
Helicopter	1	1	1

Enclosed is a list of the location(s) where the proposed activity will take place.

Construction operations are expected to commence on or about **September 1, 2003**.

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

Sincerely,

Spinnaker Exploration Company, L.L.C.

  
Scott Broussard  
Vice President Drilling & Production

tgb  
enclosures

## East Cameron Block 312 OCS-G21077

### PROPOSED WELL/STRUCTURE LOCATIONS

WELL/ STRUCTURE NAME	SURFACE LOCATION	BOTTOM-HOLE LOCATION (FOR WELLS)
Platform <u>X</u> or Well <u>X</u>  Name: <u>EC312-A</u> <u>WELL A001</u> (COMPLETED)	CALLS: 4049.90' F S L & 3765.29' F W L OF LEASE: OCS-G 21077, EAST CAMERON AREA, BLOCK: 312	CALLS: LEASE: BLOCK:
	X: <u>1,528,039.43'</u> Y: <u>-152,481.79'</u>	X: Y:
	LAT: <u>28° 14' 20.808"</u> LONG: <u>92° 47' 54.648"</u>	LAT: LONG:
	TVD (IN FEET): MD (IN FEET):	WATER DEPTH (IN FEET): <u>208'</u>
Platform <u>  </u> or Well <u>  </u>  Name: <u>          </u>	CALLS: LEASE: BLOCK:	CALLS: LEASE: BLOCK:
	X: Y:	X: Y:
	LAT: LONG:	LAT: LONG:
	TVD (IN FEET): MD (IN FEET):	WATER DEPTH (IN FEET):
Platform <u>  </u> or Well <u>  </u>  Name: <u>          </u>	CALLS: LEASE: BLOCK:	CALLS: LEASE: BLOCK:
	X: Y:	X: Y:
	LAT: LONG:	LAT: LONG:
	TVD (IN FEET): MD (IN FEET):	WATER DEPTH (IN FEET):
Platform <u>  </u> or Well <u>  </u>  Name: <u>          </u>	CALLS: LEASE: BLOCK:	CALLS: LEASE: BLOCK:
	X: Y:	X: Y:
	LAT: LONG:	LAT: LONG:
	TVD (IN FEET): MD (IN FEET):	WATER DEPTH (IN FEET):

## SECTION C

### G & G INFORMATION

#### STRUCTURE CONTOUR MAPS

A current structure maps drawn to the top of the prospective hydrocarbon accumulations showing the surface and bottom hole locations of wells 1, 2 and 3 were submitted and approved under **Plans N-07704 and S-6182.**

#### INTERPRETED SEISMIC LINES

Included as **Attachment C-1** is a copy of the letter being submitted under separate cover this date referencing approval of the No. 1, 2 and 3 locations under **Plans N-07704 and S-6182.**

#### GEOLOGICAL STRUCTURE CROSS SECTIONS

The interpreted geological cross sections depicting the proposed well locations and the geologic name and age of the anticipated structures were submitted and approved under **Plans N-07704 and S-6182.**

#### SHALLOW HAZARDS REPORT

A high resolution geophysical survey was performed by Thales Geosolutions (KC Offshore L.L.C.) on East Cameron Block 312 July 19<sup>th</sup> and 20<sup>th</sup> 1999 to clear surface location 'A', 'B', 'C'.

The purpose of the survey was to prepare an archaeological assessment and hazard study across East Cameron Block 312 to evaluate the geologic conditions and inspect for potential hazards or constraints to lease exploration and development.

Three (3) copies of the shallow hazards and archaeological report were submitted under separate cover to the Minerals Management Service to clear the locations proposed under our initial DOCD for East Cameron Block 312. (**Reference Plans N-07704 and S-6182.**)

#### SHALLOW HAZARDS ANALYSIS

A shallow hazards analysis has been prepared for the proposed surface location(s), evaluating seafloor and subsurface geologic and manmade features and conditions, and is included as **Attachment C-2. (Plan N-07704)**

#### HIGH RESOLUTION SEISMIC LINES

The annotated shallow hazards lines within 500 feet for the existing surface location(s) were previously reviewed and approved under **Plans N-07704 and S-6182.**



## **TIME VERSUS DEPTH TABLES**

The migrated and annotated deep seismic section in depth were previously reviewed and approved under **Plans N-07704 and S-6182**.

## **STRATIGRAPHIC COLUMN**

A generalized biostratigraphic/lithostratigraphic column from the seafloor to the total depth of the existing wells was previously reviewed and approved under **Plan N-07704**.

## **DESCRIPTION OF HYDROCARBON TRAPPING ELEMENTS**

## **ESTIMATED DEPTH OF GEOPRESSURE**

A 12.5 ppg geopressure occurred between an interval from 6000 to 6500' in Diamond Chemicals' G 2057 No.2 well and 7000 to 7500' in the G 2057 No.3. These wells were drilled to TD's of 7,165 MD=TVD and 11,000, respectively.

## **HYDROGEN SULFIDE INFORMATION**

Spinnaker is requesting the proposed target sands to be penetrated in the proposed welders be classified as absent of hydrogen sulfide. The basis for this determination is on the drilling history of Lease OCS-G 21077, East Cameron Block 312, wells (G 21077 No.1 and 2) which were previously drilled and completed. In accordance with 30 CFR 250.67, Spinnaker Exploration Company, L.L.C. requests that East Cameron Block 312 be classified as being in a "Zone Where the Absence of H<sub>2</sub>S has been Confirmed." (Previously approved under **Plan N-07704**).

**PUBLIC  
INFORMATION**

**Spinnaker Exploration Company, L.L.C.**  
**East Cameron Block 312**  
**OCS-G 21077**  
**Shallow Hazards Analysis**

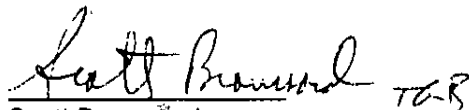
An evaluation of the potential shallow hazards and an assessment of possible cultural resources in the referenced block were conducted July 19<sup>th</sup> and 20<sup>th</sup>, 1999 by Thales Geosolutions, Inc. (KC Offshore LLC) to clear the surface locations for the above referenced wells.

Spinnaker Exploration Company, L.L.C. (Spinnaker) drilled wells 1, 2 and 3 from a single surface location in Block 312.

Our surface location is not near the three (3) active pipelines or the mud mounds on the block. The location is 1400 feet due west of Newfield's 8-inch gas pipeline (Segment No. 6677). There is an amplitude anomaly NE of our proposed location. Differential GPS will be utilized to position the derrick and lay barge anchors. This location was previously approved under **Plan N-07704**

In conclusion, the location was found to be free of geologic hazards. However, all due caution will be exercised when running anchors at this location.

**The proposed platform location was previously approved.**

 TC-R

Scott Broussard  
V.P. Drilling & Production

## **SECTION D**

### **BIOLOGICAL INFORMATION**

The seafloor disturbing activities proposed in this Plan will be at a water depth of 282 feet at the **EC312-A (Nos.1, 2 and 3)** location. The water depth ranges from **192 to 214** feet East Cameron Block 312.

#### **MAPS**

These maps were previously submitted under Plan **N-07704** and were 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 well and structure.

#### **ANALYSIS**

The analysis of seafloor features and areas that could be disturbed by the activities proposed in this Plan was previously submitted under Plan **N-07704**.

#### **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**

**East Cameron Block 312** is not a Pinnacle Trend Block; therefore the Live Bottom (Pinnacle Trend) Lease Stipulation does not apply.

## **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 screens. 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

## SECTION E

### Wastes and Discharge Information

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

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 East Cameron Block 312 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. **(No drilling proposed)**

## SECTION E

### Wastes and Discharge Information (No drilling proposed)

**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

(No drilling proposed)

**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** 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.

The estimated quantity and rates of discharges applicable to the drilling fluids/cuttings based on hole size interval and washout were previously submitted under Plans N-07704 and S-06182.

Typical mud components and additives were previously submitted as Attachment E-3 under Plans N-07704 and S-06182.

Water Base and Oil Base Mud System Components and Additives were previously submitted as **Attachments E-4 and E-5** under Plans N-07704 and S-06182.

**No development drilling is planned at this time. Wells 1, 2 and 3 were drilled with water base mud.**

## 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 Approximate Composition</b>	<b>Amount to be Discharged (volume or rate)</b>	<b>Maximum Discharge Rate</b>	<b>Treatment and/or Storage, Discharge Location and Discharge Method</b>
Water-based drilling fluids	None	Bulk discharge of mud in casing following TA	<u>EC312</u> Discharge overboard
Drill cuttings associated with water-based fluids	None	Bulk discharge of mud in casing following TA	<u>EC312</u> Discharge overboard
Drill cuttings associated with synthetic drilling fluids	None	None	None
Muds, cuttings and cement at the seafloor	None	Bulk discharge of mud in casing following TA	<u>EC312</u> Discharge overboard
Produced water	40,000 bbl/day (maximum)	40,000 bbl/day	<u>EC312</u> Treat for oil and grease and discharge overboard
Sanitary wastes Barge Lift boat	20 gals/person/day	Not applicable	<u>EC312</u> Chlorinate and Discharge overboard
Domestic wastes Barge Lift boat	30 gal/person/day	Not applicable	<u>EC312</u> Remove floating solids and discharge overboard



Type of Waste Approximate Composition	Amount to be Discharged (volume or rate)	Maximum Discharge Rate	Treatment and/or Storage, Discharge Location and Discharge Method
Deck drainage	0-4,000 bbl/day Dependant upon rainfall	Not applicable	<u>EC312</u> Remove oil and grease and discharge overboard
Well treatment, workover or completion fluids	300 bbls/day	300 bbls/day during these types of operations	<u>EC312</u> Remove oil and grease and discharge overboard
Uncontaminated fresh or seawater	Varied	Not applicable	<u>EC312</u> Discharge overboard
Desalinization Unit water	700 bbl/day	Not applicable	<u>EC312</u> Discharged Overboard
Uncontaminated bilge water	None	None	None
Uncontaminated ballast water	10,000 bbls	400 gal/min (pump capacity)	<u>EC312</u> Discharged overboard
Misc discharges to which treatment chemicals have been added	Varied	Not applicable	<u>EC312</u> Discharged Overboard
Other misc discharges	Varied	Not applicable	<u>EC312</u> Discharged Overboard

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

<b>Type of Waste Approximate Composition</b>	<b>Amount</b>	<b>Rate per Day</b>	<b>Name/Location of Disposal Facility</b>	<b>Treatment and/or Storage, Transport and Disposal Method<sup>4</sup></b>
Spent oil-based drilling fluids and cuttings	6000	100 bbl/day (average)	Newpark <sup>1</sup>	Store in cuttings box and transport by boat to shore base
Spent synthetic-based drilling fluids	None	None	None	None
Oil-contaminated produced sand	200 lbs/yr	0.6 bbl/day	Newpark <sup>1</sup>	Store in cuttings box and transport by boat to shore base
Waste Oil	NA	NA	NA	NA
Norm-contaminated wastes	1 ton	Not applicable	Newpark <sup>1</sup>	Transport to a transfer station via dedicated barge
Trash and debris	1000 ft <sup>3</sup>	3 ft <sup>3</sup>	DeHyco dock Cameron	Transport in storage bins on boats to shore base
Chemical product wastes	100 bbls	2 bbl/day	Envirosolutions <sup>2</sup> or Total Recycling Technologies Inc. <sup>3</sup>	Transport in barrels on boat to shore base
Workover fluids- Not Discharged	150 bbls	2 bbl/day	Vendor or Newpark <sup>1</sup>	Transport in barrels on boats or barge to shore base

<sup>1</sup> Newpark Transfer Stations to be utilized are located in Cameron, Louisiana 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 shore base by work boats. From the shore base, it is usually transported to the disposal or recycling center by truck.

## SECTION F

### OIL SPILL RESPONSE AND CHEMICAL INFORMATION

The Regional Oil Spill Response Plan (OSRP) Bi-Annual Update was approved by MMS April 28, 2003. Activities proposed in this DOCD 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 **Cameron, Louisiana** would be transported to a staging area also in **Cameron, Louisiana**.

**The worst-case discharge (WCD) proposed in this DOCD is less than 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 **DOCD** are considered far-shore (>10 miles from the shoreline). The Worst Case Discharge (WCD) scenario from the proposed activities in this **DOCD** 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 WCD</b>	<b>DOCD WCD</b>
Type of Activity	Production	Production
Spill Loc. (Area/Block)	H1197	EC312
Facility Designation	Platform A	Platform A
Distance to Nearest Shoreline (miles)	<b>28</b>	<b>92</b>
Volume (bbls)	<b>2270</b>	<b>1001</b>
Type of Oil (crude, cond., diesel)	<b>Condensate</b>	<b>Condensate/Oil</b>
API Gravity	<b>46.0°</b>	<b>52.0°/35.0°</b>

## **Worst-Case Discharge**

The Regional Oil Spill Response Plan (OSRP) Bi-Annual Update was approved by MMS April 28, 2003.

Since **Spinnaker** has the capability to respond to the worst case spill scenario included in its approved regional OSRP 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.

**Spinnaker's** East Cameron Block 312-A Platform will not have any storage tanks or large vessels. There will not be a produced water discharge at our platform. The gas/condensate and oil production will flow via 6-inch bulk oil and 4" bulk gas R-O-W pipelines to Marathon's EC321-A Platform in East Cameron Block 321. All separation and processing will be done at Marathon's 'A' platform.

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

This location is over 92 miles off the Louisiana Coast. The condensate and oil production from wells G21077 1, 2 and 3 are expected to be 35-52° API gravity. The liquid hydrocarbons 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 14-18 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 Cameron, it would just take the 10-11 hours of travel time getting to the location.

## OIL SPILL RESPONSE AND CHEMICAL INFORMATION

The Regional Oil Spill Response Plan (OSRP) Bi-Annual Update was approved by MMS April 28, 2003. Activities proposed in this **DOCD** will be covered by the Regional Oil Spill Response Plan. Spinnaker Exploration Company, L.L.C. is the only entity provided for in the Regional Oil Spill Response Plan.

Spinnaker's primary equipment provider is the National Response Corporation (NRC) and Clean Gulf Associates (CGA). MSRC's STARS network will provide closest available personnel, as well as an MSRC supervisor to operate the equipment.

**Spinnaker's** East Cameron Block 312-A Platform will not have any storage tanks or large vessels. There will not be a produced water discharge at our platform. The gas/condensate and oil production will flow via 6-inch bulk oil and 4" bulk gas R-O-W pipelines to Marathon's EC321-A Platform in East Cameron Block 321. All separation and processing will be done at Marathon's 'A' platform.

In the event of a spill, mechanical response equipment located in **Cameron, Louisiana** will be utilized.

The worst-case discharge calculated for the proposed activities is less than **1001** barrels and does not change the worst-case discharge that is provided in the approved Regional Oil Spill Response Plan.

Since Spinnaker has the capability to respond to the WCD spill scenario included in its Regional OSRP, I hereby certify that Spinnaker has the capability to respond, to the maximum extent practicable, to a WCD resulting from the activities proposed in our **DOCD**.

### **Synthetic and Oil Base Muds**

No drilling is proposed under this plan. This wells were drilled with water base mud.

### **Pollution Prevention Measures**

There is a no dumping policy at all Spinnaker platform and drilling locations. This policy applies to fixed structures, vessels under charter, drilling rigs, lift boats and barges.

Please refer to **Section E** for our pollution prevention measures and guidelines.

## SECTION G

### AIR EMISSIONS INFORMATION

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 oil spills or blowouts.

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

Included in this section is the projected Air Quality Emissions Report prepared in accordance with Appendix H of Notice to Lessees (NTL) No. 2000-G10) addressing the installation of the East Cameron Block 312-A Platform, tie-back and completion of well No.3 and fugitive emissions at the facility. This is an unmanned minimal structure and facility.

**Spinnaker's** East Cameron Block 312-A Platform will not have any storage tanks or large vessels. There will not be a produced water discharge at our platform. The gas/condensate and oil production will flow via 6-inch bulk oil and 4" bulk gas R-O-W pipelines to Marathon's EC321-A Platform in East Cameron Block 321. All separation and processing will be done at Marathon's 'A' platform.

**Note: All emissions associated with the drilling and completion of well Nos.1 and 2 were submitted and approved under plan N-07704.**

Spinnaker will utilize a typical jack-up rig (**Not a Gorilla Class rig**) to tie-back and complete the G21077 No.3 well.

DOCD AIR QUALITY SCREENING CHECKLIST

OMB Control No. xxxx-xxxx  
Expiration Date: Pending

COMPANY	SPINNAKER EXPL. COMPANY, L.L.C.
AREA	EAST CAMERON
BLOCK	312
LEASE	OCS-G 21077
PLATFORM	A
WELL	1,2,3
COMPANY CONTACT	THOMAS G. BECNEL
TELEPHONE NO.	713/356-7534
REMARKS	INSTALL STRUCTURE WITH DERRICK BARGE.

"Yes"	"No"	Air Quality Screening Questions
	X	1. Is the concentration of H <sub>2</sub> S expected greater than 20 ppm?
X		2. Is the burning of produced liquids proposed?
	X	3. Is gas flaring or venting which would require Regional Supervisor of Production and Development approval under Subpart K proposed?
	X	4. Does the facility process production from 8 or more active wells?
	X	5. Is the facility within 200km of the Breton Area?
	X	6. Will the proposed activity be collocated at (same surface location), or bridge attached to, a previously approved facility?
	X	7. Is the proposed activity within 25 miles of shore?
	X	8. Are semi-submersible activities involved and is the facility within 75 miles of shore?
	X	9. Are drillship operations involved and is the facility within 145 miles of shore?

If ALL questions are answered "No":

Fill in the information below about your lease term pipelines and submit only this coversheet with your plan.

If ANY question is answered "Yes":

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

LEASE TERM PIPELINE CONSTRUCTION INFORMATION:		
YEAR	NUMBER OF PIPELINES	TOTAL NUMBER OF CONSTRUCTION DAYS
1999		
2000		
2001		
2002		
2003	0	
2004		
2005		
2006		
2007		
2008		
2009		

**AIR EMISSION COMPUTATION FACTORS**

OMB Control No. xxxx-xxxx

Expiration Date: Pending

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

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

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



AIR EMISSION CALCULATIONS - FIRST YEAR

OMB Control No. xxxx-xxxx  
Expiration Date: Pending

COMPANY	AREA	BLOCK	LEASE	PLATFORM	WELL	CONTACT	PHONE	REMARKS									
SPINNAKER EXPL COM	EAST CAMERON	312	OCS-G 21077	A	1,2,3	THOMAS G BECNEL	713/356-7534	#REF!									
OPERATIONS	EQUIPMENT	RATING	MAX. FUEL	ACT. FUEL	RUN TIME		MAXIMUM POUNDS PER HOUR					ESTIMATED TONS					
							HP	GAL/HR	GAL/D	PM	SOx	NOx	VOC	CO	PM	SOx	NOx
	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	24	21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	PRIME MOVER>600hp diesel	0	0	0.00	24	21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	PRIME MOVER>600hp diesel	12000	579.6	13910.40	24	21	6.46	38.80	290.75	8.72	63.44	2.13	9.78	73.27	2.20	15.99	
	PRIME MOVER>600hp diesel	0	0	0.00	24	21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	BURNER diesel	0			0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	AUXILIARY EQUIP<600hp diesel	300	14.49	347.76	1	3	0.66	0.97	9.25	0.74	2.00	0.00	0.00	0.01	0.00	0.00	
	VESSELS>600hp diesel(crew)	2000	96.6	2318.40	4	15	1.41	6.47	48.46	1.45	10.57	0.04	0.19	1.45	0.04	0.32	
	VESSELS>600hp diesel(supply)	2500	120.75	2898.00	8	9	1.76	8.08	60.57	1.82	13.22	0.06	0.29	2.18	0.07	0.48	
	VESSELS>600hp diesel(tugs)	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	
PIPELINE INSTALLATION	PIPELINE LAY BARGE diesel	3466	167.4078	4017.79	24	9	1.83	3.70	83.98	2.52	18.32	0.20	0.40	9.07	0.27	1.98	
	SUPPORT VESSEL diesel (TUG)	1200	57.96	1391.04	24	9	0.63	1.28	29.07	0.87	6.34	0.07	0.14	3.14	0.09	0.69	
	SUPPORT VESSEL diesel (TUG)	1200	57.96	1391.04	24	9	0.63	1.28	29.07	0.87	6.34	0.07	0.14	3.14	0.09	0.69	
	SUPPORT VESSEL diesel (CRE)	1224	59.1192	1418.86	24	9	0.65	1.31	29.66	0.89	6.47	0.07	0.14	3.20	0.10	0.70	
	VESSELS>600hp diesel SUPPLY	2000	96.6	2318.40	24	9	1.41	6.47	48.46	1.45	10.57	0.15	0.70	5.23	0.16	1.14	
	PIPELINE BURY BARGE diesel	3466	167.4078	4017.79	24	12	1.83	3.70	83.98	2.52	18.32	0.26	0.53	12.09	0.36	2.64	
	SUPPORT VESSEL diesel (TUG)	1200	57.96	1391.04	24	12	0.63	1.28	29.07	0.87	6.34	0.09	0.18	4.19	0.13	0.91	
	SUPPORT VESSEL diesel (TUG)	1200	57.96	1391.04	24	12	0.63	1.28	29.07	0.87	6.34	0.09	0.18	4.19	0.13	0.91	
	SUPPORT VESSEL diesel (CRE)	1224	59.1192	1418.86	24	12	0.65	1.31	29.66	0.89	6.47	0.09	0.19	4.27	0.13	0.93	
FACILITY INSTALLATION	DERRICK BARGE diesel	6037	291.5871	6998.09	24	14	3.19	4.02	146.27	4.39	31.91	0.54	0.68	24.57	0.74	5.36	
	MATERIAL TUG diesel	3000	144.9	3477.60	24	14	1.59	2.00	72.69	2.18	15.86	0.27	0.34	12.21	0.37	2.66	
	SUPPORT VESSEL diesel (TUG)	4200	202.86	4868.64	24	14	2.22	2.80	101.76	3.05	22.20	0.37	0.47	17.10	0.51	3.73	
	SUPPORT VESSEL diesel (CRW)	1224	59.1192	1418.86	24	14	0.65	0.82	29.66	0.89	6.47	0.11	0.14	4.98	0.15	1.09	
	PRODUCTION	RECIP.<600hp diesel (Crane)	115	5.5545	133.31	2	92	0.25	0.37	3.55	0.28	0.77	0.02	0.03	0.33	0.03	0.07
RECIP.>600hp diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
SUPPORT VESSEL diesel	2500	120.75	2898.00	4	92	1.32	2.67	60.57	1.82	13.22	0.24	0.49	11.15	0.33	2.43		
TURBINE nat gas	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
RECIP.2 cycle lean nat gas	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
RECIP.4 cycle lean nat gas	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
RECIP.4 cycle rich nat gas	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
BURNER nat gas	0	0.00	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
MISC.	BPD	SCF/HR	COUNT														
TANK-FLARE-	0			0	0			0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	
PROCESS VENT-FUGITIVES-			2000.0	0	0					1.00				1.10			
GLYCOL STILL VENT-				0	0					0.00				0.00			
DRILLING WELL TEST	OIL BURN GAS FLARE	300			24	1	5.25	85.38	25.00	0.13	2.63	0.06	1.02	0.30	0.00	0.03	
			208333		24	1		0.12	14.87	12.56	80.94		0.00	0.18	0.15	0.97	
<b>2003 YEAR TOTAL</b>							<b>45.96</b>	<b>221.30</b>	<b>1609.17</b>	<b>61.41</b>	<b>425.93</b>	<b>5.26</b>	<b>17.46</b>	<b>206.89</b>	<b>7.47</b>	<b>46.04</b>	
EXEMPTION CALCULATION	DISTANCE FROM LAND IN MILES											3063.60	3063.60	3063.60	3063.60	69290.04	
	92.0																

AIR EMISSIONS CALCULATIONS - SECOND YEAR

OMB Control No. xxxx-xxxx  
Expiration Date: Pending

COMPANY	AREA	BLOCK	LEASE	PLATFORM	WELL	CONTACT	PHONE	REMARKS									
SPINNAKER EXPL CO	EAST CAMERON	312	OCS-G 21077	A	1,2,3	THOMAS G BECNEL	713/356-7534	#REF!									
OPERATIONS	EQUIPMENT	RATING	MAX. FUEL	ACT. FUEL	RUN TIME		MAXIMUM POUNDS PER HOUR					ESTIMATED TONS					
	Diesel Engines	HP	GAL/HR	GAL/D													
	Nat. Gas Engines	HP	SCF/HR	SCF/D													
	Burners	MMBTU/HR	SCF/HR	SCF/D	HR/D	DAYS	PM	SOx	NOx	VOC	CO	PM	SOx	NOx	VOC	CO	
DRILLING	PRIME MOVER>600hp diesel	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	PRIME MOVER>600hp diesel	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	PRIME MOVER>600hp diesel	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	PRIME MOVER>600hp diesel	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	BURNER diesel	0			0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	AUXILIARY EQUIP <600hp diesel	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	VESSELS>600hp diesel(crew)	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	VESSELS>600hp diesel(supply)	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	VESSELS>600hp diesel(tugs)	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
PIPELINE INSTALLATION R-O-W P/L	PIPELINE LAY BARGE diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	SUPPORT VESSEL diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	PIPELINE BURY BARGE diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	SUPPORT VESSEL diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	VESSELS>600hp diesel(crew)	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	VESSELS>600hp diesel(supply)	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
FACILITY INSTALLATION	LIFT BOAT 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 SUPPLY	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	SUPPORT VESSEL diesel (CRW)	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
PRODUCTION	RECIP. <600hp diesel	115	5.5545	133.31	2	365	0.25	0.37	3.55	0.28	0.77	0.09	0.14	1.29	0.10	0.28	
	RECIP. >600hp diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	SUPPORT VESSEL diesel	2500	120.75	2898.00	4	365	1.76	8.08	60.57	1.82	13.22	1.29	5.90	44.22	1.33	9.65	
	TURBINE nat gas	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	RECIP 2 cycle lean nat gas	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	RECIP 4 cycle lean nat gas	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	RECIP 4 cycle rich nat gas	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	BURNER nat gas	0	0.00	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	MISC.	BPD	SCF/HR	COUNT													
	TANK- FLARE-	0			0	0			0.00	0.00	0.00		0.00	0.00	0.00	0.00	
	PROCESS VENT-		0		0	0			0.00	0.00	0.00						
	FUGITIVES-			2000.0		365				1.00				4.38			
	GLYCOL STILL VENT-		0		0	0				0.00				0.00			
DRILLING WELL TEST	OIL BURN	0			0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	GAS FLARE		0		0	0			0.00	0.00	0.00			0.00	0.00	0.00	
<b>2004 YEAR TOTAL</b>							<b>2.02</b>	<b>8.46</b>	<b>64.12</b>	<b>3.10</b>	<b>13.98</b>	<b>1.38</b>	<b>6.04</b>	<b>45.51</b>	<b>5.81</b>	<b>9.93</b>	
EXEMPTION CALCULATION	DISTANCE FROM LAND IN MILES											<b>499.50</b>	<b>499.50</b>	<b>499.50</b>	<b>499.50</b>	<b>20679.49</b>	
	15.0																

**AIR EMISSION CALCULATIONS**

OMB Control No. xxxx-xxxx  
Expiration Date: Pending

COMPANY	AREA	BLOCK	LEASE	PLATFORM	WELL
SPINNAKER E	EAST CAMERON	312	OCS-G 21077	A	1,2,3
Year	Emitted Substance				
	PM	SOx	NOx	VOC	CO
2003	5.26	17.46	206.89	7.47	46.04
2004	1.38	6.04	45.51	5.81	9.93
2005	1.38	6.04	45.51	5.81	9.93
2006	1.38	6.04	45.51	5.81	9.93
2007	1.38	6.04	45.51	5.81	9.93
2008	1.38	6.04	45.51	5.81	9.93
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
<b>Allowable</b>	<b>3063.60</b>	<b>3063.60</b>	<b>3063.60</b>	<b>3063.60</b>	<b>69290.04</b>

## **SECTION H**

### **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 Development Operations Coordination Document  
East Cameron Area Block 312  
OCS-G-21077**



**June 2003**

**(CEI 23046)**

**Environmental Impact Analysis  
For  
Initial Development Operations Coordination Document  
East Cameron Area Block 312  
OCS-G-21077**

**Prepared by:**

**Richard N. Greig, B.S.  
Coastal Environments, Inc.  
Applied Science Division  
1260 Main Street  
Baton Rouge, Louisiana 70802**

**Prepared For:**

**Mr. Thomas Becnel  
Regulatory Consultant  
Spinnaker Exploration Company, L.L.C.  
1200 Smith Street, Suite 800  
Houston, Texas 77002**



**June 2003**

**(CEI 23046)**

**(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	X (8)	X		X	X (8)	
Sea Turtles	X (8)	X		X	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 Sonnier Bank located within Vermilion South Area Block 305 approximately 20 miles away. There are also no submarine banks within East Cameron Area Block 312 that have relief greater than 2 meters and no essential fish habitat exists within this block.

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 206 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 East Cameron Area Block 312. 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 East Cameron Area Block 312 occur at a water depth of 206 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 East Cameron Area Block 312. 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 East Cameron Area Block 312.

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*

East Cameron Area Block 312 is within the limits of the coastal demersal fisheries, coastal pelagic fisheries and major finfish harvest 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 East Cameron Area Block 312: 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 East Cameron Area Block 312 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 East Cameron Area Block 312 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 East Cameron Area Block 312 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 East Cameron Area Block 312 and this area is not in a zone that has a high probability for shipwrecks. The nearest known shipwreck is the *Dauphine Adams* within East Cameron Area Block 321. The survey of the block in

question did not find any evidence of any shipwrecks. 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 an archeological assessment was not required for this block. 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*

East Cameron Area Block 312 is within the limits of the coastal demersal fisheries, coastal pelagic fisheries and major finfish harvest 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 East Cameron Area Block 312: 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 East Cameron Area Block 312 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 East Cameron Area Block 312 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 East Cameron Area Block 312 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 Cameron Parish. If an oil spill were to occur there would be a 0/2/17 percent chance (3, 10, and 30 days, respectively) that the spill would impact any beaches on the shore of Cameron Parish approximately 260 miles from East Cameron Block 312.

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 Cameron Parish. If an oil spill were to occur there would be a 0/2/17 percent chance (3, 10, and 30 days, respectively) that the spill would impact the wetlands of Cameron Parish, which is over 260 miles away from East Cameron Area Block 312.

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 Cameron Parish. If an oil spill were to occur there would be a 0/2/17 percent chance (3, 10, and 30 days, respectively) that the spill would impact shore birds, rookeries, or other coastal nesting birds in Cameron Parish, which is over 260 miles away from East Cameron Area Block 312.

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 Cameron Parish. If an oil spill were to occur there would be a 0/2/17 percent chance (3, 10, and 30 days, respectively) that the spill would impact Rockefeller Wildlife Management Area approximately 265 miles from East Cameron Area Block 312.

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 East Cameron Area Block 312 are expected to impact any wilderness areas in onshore locations. The only wilderness area in Louisiana, as designated by the U.S. Congress, is Kisatchie Hills, which is located in central Louisiana, hundreds of miles away and land locked.

## **Other Environmental Resources Identified**

It is expected that the proposed activities in East Cameron Area Block 312 will have no other environmental resources identified or impacted.

### **(C) Impacts on East Cameron Area Block 312 Proposed Activities**

It is expected that the proposed activities in East Cameron Area Block 312 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 East Cameron Area Block 312.

### **(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 East Cameron Area Block 312.

### **(G) References**

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

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.



**Tom Becnel**

**From:** Gene Williams [gwilliams-nova@houston.rr.com]  
**Sent:** Thursday, June 26, 2003 1:14 PM  
**To:** Tom Becnel  
**Cc:** Keith Codd  
**Subject:** Re: EC 312 - Pipeline

I think I got it straight.

The 6" is oil - flows from EC 312 (Spinnaker) to EC 321 (Marathon)

The 4" is gas - flows from EC 312 (Spinnaker) to EC 321 (Marathon)

The 2" is gas lift - flows from EC 321 (Marathon) to EC 312 (Spinnaker)

I will relay this information to Thales so they can finish up their hazard surveys.

Thanks  
Gene

----- Original Message -----

**From:** Tom Becnel  
**To:** Gene Williams  
**Sent:** Thursday, June 26, 2003 12:54 PM  
**Subject:** RE: EC 312 - Pipeline

WHICH IS THE OIL LINE? THE 4".

TGB

-----Original Message-----

**From:** Gene Williams [mailto:gwilliams-nova@houston.rr.com]  
**Sent:** Thursday, June 26, 2003 12:51 PM  
**To:** Tom Becnel  
**Subject:** EC 312 - Pipeline

Per our discussion of yesterday:  
I received e-mails this morning from TEC and Matt:

Final pipelines will be  
6.625" x 0.432" API 5L X-42 ANSI 600  
4.5" x 0.337" API 5L X-42 ANSI 600  
2.375" x 0.218" API 5L - X-42 ANSI 600

Not sure what service they will be other than the 2.375" will obviously be a gas lift.

The length of each pipeline is 7,200' excluding risers.  
All three pipelines connect EC 312 (Spinnaker) to EC 321 (Marathon "A" Platform).  
More than likely we will install all three simultaneously with a conventional lay barge.  
Any questions, call  
Thanks  
Gene

**Tom Becnel**

---

**To:** Mack McClellan

**Cc:** Sheila Hartley

**Subject:** THREE (3) EAST CAMERON PIPELINES 6", 4", 2"

I NEED 3 CHECKS IN THE AMOUNT OF \$2380 FOR THE SUBJECT R-O-W PIPELINE APPLICATIONS.

MINERALS MANAGEMENT SERVICES

WOULD IT BE POSSIBLE TO GET THEM BY MONDAY?

Thomas G. Becnel

Spinnaker Exploration Company, L.L.C.

713/356-7534

713/739-0725 Fax

tbecnel@spinexp.com

6/26/2003

## SECTION I

### COASTAL ZONE CONSISTENCY CERTIFICATION

Issues identified in the Louisiana 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 Louisiana is enclosed as **Attachment I-1**.

**COASTAL ZONE MANAGEMENT**

**CONSISTENCY CERTIFICATION**

**INITIAL DOCD**

**EAST CAMERON BLOCK 312**

**LEASE OCS-G 21077**

The proposed activities described in this Plan comply with Louisiana'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

  
\_\_\_\_\_  
Scott Broussard  
Certifying Official

July 28, 2003  
Date

## SECTION J

### PLAN INFORMATION FORM

Included in this section is the Plan Information Form prepared in accordance with Appendix J of Notice to Lessees NTL 2000-G10. (**Attachment J-1**)  
The bathymetry map with surface location(s) is included as **Attachment J-2**.

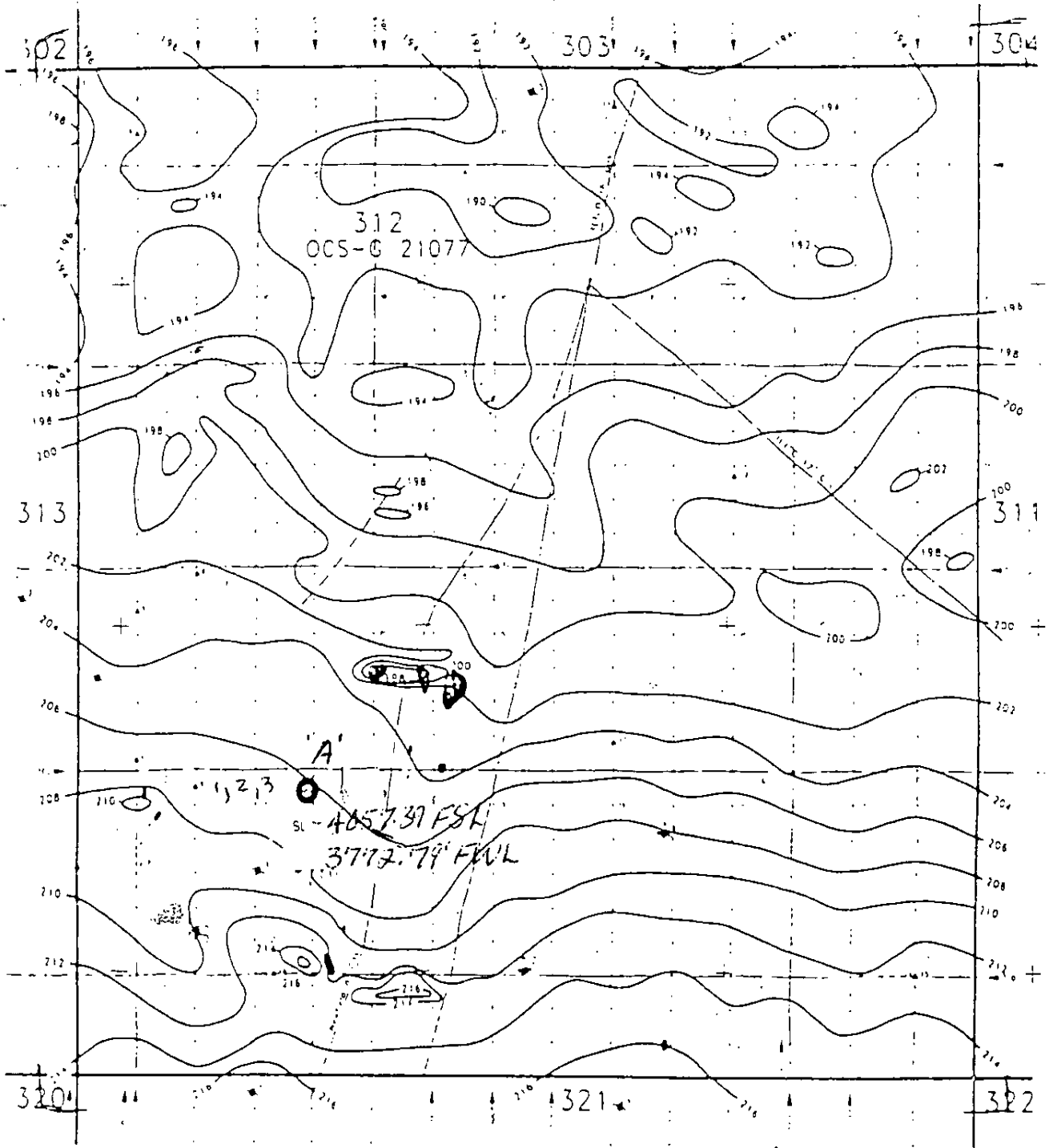
**OCS PLAN INFORMATION FORM**  
(USE SEPARATE FORM FOR EACH LEASE)

EXPLORATION PLAN	DEVELOPMENT OPERATIONS COORDINATION DOCUMENT	X	DEVELOPMENT & PRODUCTION PLAN
OPERATOR: SPINNAKER EXPLORATION COMPANY, L.L.C.		ADDRESS: 1200 SMITH STREET, SUITE 800	
MMS OPERATOR NO.: 02169		HOUSTON, TEXAS 77002	
CONTACT PERSON: TOM BECNEL		PHONE NO. (713) 356-7534	
PROPOSED START DATE: 10-01-03	RIG TYPE: JU SS PF DS OTHER	DISTANCE TO CLOSEST LAND (IN MILES): 92	
NEW OR UNUSUAL TECHNOLOGY	YES	NO <input checked="" type="checkbox"/>	ONSHORE SUPPORT BASE (S): CAMERON, LOUISIANA
NARRATIVE DESCRIPTION OF PROPOSED ACTIVITIES: INSTALL 3-PILE PRODUCTION PLATFORM IN EAST CAMERON BLOCK 312 AND LAY 3			
RIGHT- OF-WAY PIPELINES FROM EC312-A TO MARATHON'S EC321-A PLATFORM AND PRODUCE WELLS 1, 2 AND 3.			
PROJECT NAME, IF APPLICABLE:			

**PROPOSED WELL/STRUCTURE LOCATIONS**

WELL/ STRUCTURE NAME	SURFACE LOCATION	BOTTOM-HOLE LOCATION (FOR WELLS)
Platform <input checked="" type="checkbox"/> or Well <input checked="" type="checkbox"/> Name: <u>EC312-A</u> WELL A001 (COMPLETED)	CALLS: 4049.90' F S L & 3765.29' F W L OF LEASE: OCS-G 21077, EAST CAMERON AREA, BLOCK: 312 X: 1,528,039.43' Y: -152,481.79' LAT: 28° 14' 20.808" LONG: 92° 47' 54.648"	CALLS: LEASE: BLOCK: X: Y: LAT: LONG:
	TVD (IN FEET):	MD (IN FEET): 4862'      WATER DEPTH (IN FEET): 208'
Platform <input type="checkbox"/> or Well <input checked="" type="checkbox"/> Name: <u>A002</u> (COMPLETED)	CALLS: 4049.45' F S L & 3772.78' F W L OF LEASE: OCS-G 21077, EAST CAMERON AREA, BLOCK: 312 X: 1,528,046.92' Y: -152,482.23' LAT: 28° 14' 20.804" LONG: 92° 47' 54.564"	CALLS: LEASE: BLOCK: X: Y: LAT: LONG:
	TVD (IN FEET):	MD (IN FEET): 8282'      WATER DEPTH (IN FEET): 208'
Platform <input type="checkbox"/> or Well <input checked="" type="checkbox"/> Name: <u>A003</u> (TA'D)	CALLS: 4042.4' F S L & 3764.85' F W L OF LEASE: OCS-G 21077, EAST CAMERON AREA, BLOCK: 312 X: 1,528,040.89' Y: -152,482.99' LAT: 28° 14' 20.734" LONG: 92° 47' 54.652"	CALLS: LEASE: BLOCK: X: Y: LAT: LONG:
	TVD (IN FEET):	MD (IN FEET): 9090'      WATER DEPTH (IN FEET): 208'
Platform <input type="checkbox"/> or Well <input type="checkbox"/> Name: _____	CALLS: LEASE: BLOCK: X: Y: LAT: LONG:	CALLS: LEASE: BLOCK: X: Y: LAT: LONG:
	TVD (IN FEET):	MD (IN FEET):      WATER DEPTH (IN FEET):

**PUBLIC  
INFORMATION**



**PUBLIC  
INFORMATION**

**BEST AVAILABLE COPY**

**BATHYMETRY**

**EAST CAMERON 312**

**ATTACHMENT J-2**