

March 9, 2001

To: Public Information (MS 5034)

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

Subject: Public Information copy of plan

Control # - S-05585

Type - Supplemental Development Operations Coordinations Document

Lease(s) - OCS- 00060 Block - 72 Ship Shoal Area

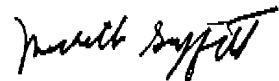
Operator - PetroQuest Energy One, L.L.C.

Description - Caisson and Well AA

Rig Type - JACKUP

Attached is a copy of the subject plan.

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



Michelle Griffitt
Plan Coordinator

| Site Type/Name | Botm Lse/Area/Blk | Surface Location | Surf Lse/Area/Blk |
|----------------|-------------------|--------------------|-------------------|
| CAIS/AA | | 7262 FNL, 7399 FEL | 00060/SS/72 |
| WELL/AA | 00060/SS/72 | 7262 FNL, 7399 FEL | 00060/SS/72 |

NOTED - SCHEXNAILDRE

ISS MAR13'01AM11:33



PetroQuest
ENERGY ONE, L.L.C.

March 7, 2001

U.S. Department of the Interior
Minerals Management Service
1201 Elmwood Park Boulevard
New Orleans, LA 70123-2394

Attention: Nick Wetzel
Plans Unit

RE: Supplemental Unit Development Operations Coordination Document for Ship Shoal Block 72 Unit (Agreement No. 14-08-001-2945), OCS Federal Waters, Gulf of Mexico, Offshore, Louisiana

Gentlemen:

In accordance with the provisions of Title 30 CFR 250.204 and that certain Notice to Lessees (NTL 2000-G21), PetroQuest Energy One, L.L.C. (PetroQuest) hereby submits for your review and approval eight (8) copies of a Supplemental Unit Development Operations Coordination Document (Plan) for the Ship Shoal Block 72 Unit (Agreement No. 14-08-001-2945), Offshore, Louisiana. Five (5) copies are "Proprietary Information" and three (3) copies are "Public Information".

Excluded from the Public Information copies are certain geologic discussions, depths of well and structure map.

PetroQuest currently has the Marine 300 MODU on location conducting sidetrack drilling operations within the unitized area. Dependent upon favorable results of these operations, PetroQuest is requesting expedited review and approval of this Plan to commence operations as early as April 1, 2001.

Should additional information be required, please contact the undersigned, or our regulatory consultant, J. Connor Consulting, Inc., Attention: Connie J. Goers at (281) 578-3388.

Sincerely,

Alfred Thomas, III
Production Manager

AT:CJG
Enclosures

| |
|-----------------------------------|
| CONTROL No. <u>5-5585</u> |
| REVIEWER: <u>Michelle Griffin</u> |
| PHONE: (504) 736-2975 |

"Public Information"
BEST AVAILABLE COPY

PETROQUEST ENERGY ONE, L.L.C.
SUPPLEMENTAL UNIT DEVELOPMENT OPERATIONS COORDINATION
DOCUMENT

SHIP SHOAL BLOCK 72 UNIT
UNIT AGREEMENT NO. 14-08-001-2945

| | |
|-----------|-----------------------------------------------------------------|
| SECTION A | <i>Contents of Plan</i> |
| SECTION B | <i>General Information</i> |
| SECTION C | <i>Geological, Geophysical & H₂s Information</i> |
| SECTION D | <i>Biological Information</i> |
| SECTION E | <i>Wastes and Discharge Information</i> |
| SECTION F | <i>Oil Spill Response and Chemical Information</i> |
| SECTION G | <i>Air Emissions Information</i> |
| SECTION H | <i>Environmental Report</i> |
| SECTION I | <i>CZM Consistency</i> |

BEST AVAILABLE COPY

SECTION A

*Lease Description/Activity
Objective/Schedule
Location/Maps
Production Facilities
Drilling Unit*

CONTENTS OF PLAN**LEASE DESCRIPTION/ACTIVITY**

Minerals Management Service previously approved Mobil Exploration & Producing U.S. Inc.'s request for unitization of the following leases comprising the Ship Shoal Block 72 Unit (Agreement No. 14-08-001-2945):

| | |
|-------------|---------------------|
| OCS 0057 | Ship Shoal Block 63 |
| OCS 0058 | Ship Shoal Block 64 |
| OCS 0059 | Ship Shoal Block 71 |
| OCS 0060 | Ship Shoal Block 72 |
| OCS 0062 | Ship Shoal Block 87 |
| OCS-G 12345 | Ship Shoal Block 63 |
| OCS-G 12346 | Ship Shoal Block 64 |
| OCS-G 12347 | Ship Shoal Block 71 |
| OCS-G 12348 | Ship Shoal Block 72 |
| OCS-G 12349 | Ship Shoal Block 87 |

Effective January 5, 2001, Minerals Management Service approved PetroQuest Energy One, L.L.C. as the designated operator and unit operator of the subject leases and unitized area, which is presently being maintained by ongoing workover/sidetrack drilling operations on existing wells within this unit.

OBJECTIVE/SCHEDULE

This Supplemental Unit Development Operations Coordination Document provides for potential drilling, completion and production of an acceleration well to the existing Lease OCS 0060, Well No. 017 (WB01), Ship Shoal Block 72 which is currently is being sidetrack drilled. The proposed acceleration well proposed in this Plan will be designated as Well Location AA. Dependent upon the anticipated favorable results, a well protector type caisson will be installed over the proposed wellbore with an associated lease pipeline.

| Activity | Start Date | Completion Date |
|------------------------------------------------------------------------------|------------|-----------------|
| Drill and Complete Well Location AA and Install Well Protector Caisson | 04-01-01 | |
| Install Lease Pipeline | 06-01-01 | |
| Hook up and Commence Production | 06-15-01 | |

LOCATION/MAPS

Included in this ~~section~~ as *Attachment A-1* is the Plan Information Form prepared in accordance with Appendix J of that certain Notice to Lessees (NTL 2000-G21). Also included as *Attachment A-2* is the appropriate well/platform location plat.

PRODUCTION FACILITIES

The subject well will be protected by a minimal well protector type caisson to be installed immediately adjacent to our existing Ship Shoal Block 72, Caisson No. 17. A schematic of the proposed structure is included as *Attachment A-3*.

PetroQuest does not anticipate installing processing equipment on the proposed caisson.

All hydrocarbon handling equipment installed for testing and production operations will be designed, installed and operated to prevent pollution from the subject structure.

PetroQuest will fabricate and install a departing bulk gas lease pipeline to transport production from the subject well to the Ship Shoal Block 72, Platform J.

No new nearshore or onshore pipelines or facilities will be constructed.

Maintenance or repairs that are necessary to prevent pollution of offshore waters shall be undertaken immediately. The facility 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

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

The subject well will be drilled and completed using the jack-up type mobile drilling rig "Marine 300". A copy of the appropriate specifications will be included with the individual Application for Permit to Drill.

In accordance with Title 30 CFR Part 250, Subpart O, an operator is to ensure 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.

BEST AVAILABLE COPY

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

| | | | | | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|---------------------------|-----------------------------------------------|------------------------------------------|--|
| EXPLORATION PLAN | DEVELOPMENT OPERATIONS COORDINATION DOCUMENT | | X | DEVELOPMENT & PRODUCTION PLAN | |
| OPERATOR: PETROQUEST ENERGY ONE, L.L.C. | | | ADDRESS: P. O. BOX 51205, LAFAYETTE, LA 70505 | | |
| MMS OPERATOR NO.: 0222 | | | | | |
| CONTACT PERSON: CONNIE GOERS | | | PHONE NO. 281-578-3388 | | |
| PROPOSED START DATE: 04-01-01 | | RIG TYPE: MARINE 300 (JU) | | DISTANCE TO CLOSEST LAND (IN MILES): 6.7 | |
| NEW OR UNUSUAL TECHNOLOGY | YES | NO | X | ONSHORE SUPPORT BASE(S): MORGAN CITY, LA | |
| NARRATIVE DESCRIPTION PROPOSED ACTIVITIES: DRILL, COMPLETE AND PRODUCE WELL LOCATION AA ADJACENT TO EXISTING CAISSON NO. 17 IN SHIP SHOAL BLOCK 72, INSTALL WELL PROTECTOR CAISSON AND LEASE PIPELINE | | | | | |
| | | | | PROJECT NAME, IF APPLICABLE: N/A | |

PROPOSED WELL/STRUCTURE LOCATIONS

| WELL / STRUCTURE NAME | SURFACE LOCATION | | BOTTOM-HOLE LOCATION (FOR WELLS) | |
|-----------------------|-------------------------------------|---------------|----------------------------------|----------------------------|
| Well Name: AA | CALLS: 7262' F N Land 7399 F E L OF | | CALLS : | |
| | LEASE OCS 0060 , SHIP SHOAL AREA, | | LEASE OCS , SHIP SHOAL AREA, | |
| | BLOCK 72 | | BLOCK 72 | |
| | X: 2,117,401.31' | | X: | |
| | Y: 106,368.05' | | Y: | |
| | LAT: 28 57' 31.112" | | LAT: | |
| LONG: 90° 57' 58.585" | | LONG: | | |
| TVD (IN FEET): | | MD (IN FEET): | | WATER DEPTH (IN FEET): 30' |

OCS-G-12348
PETROQUEST

OCS-G-12348
PETROQUEST

AA SURF
SS72

OCS-00060
PETROQUEST

**PUBLIC
INFORMATION**

SS87

00062

BEST AVAILABLE COPY



PetroQuest
ENERGY, INC.

**SUPPLEMENTAL
DEVELOPMENT AND PRODUCTION PLAN**

OCS-0060 WELL "AA"
BLOCK 72 SHIP SHOAL AREA
GULF OF MEXICO

JOHN E. CHANCE
& ASSOCIATES, INC.



GEODEIC DATUM: NAD 1927
PROJECTION: LOUISIANA SOUTH
GRID UNITS: US SURVEY FEET

SCALE
IN FEET 0 2,000'

Job No.: 01-0655

Date: 2/15/01

Drwn: VAG

Chart: Of:

Dwgfile: 0:\CADBASE\WPERMIT\LASOUTH\SS\PERMIT\72DPP

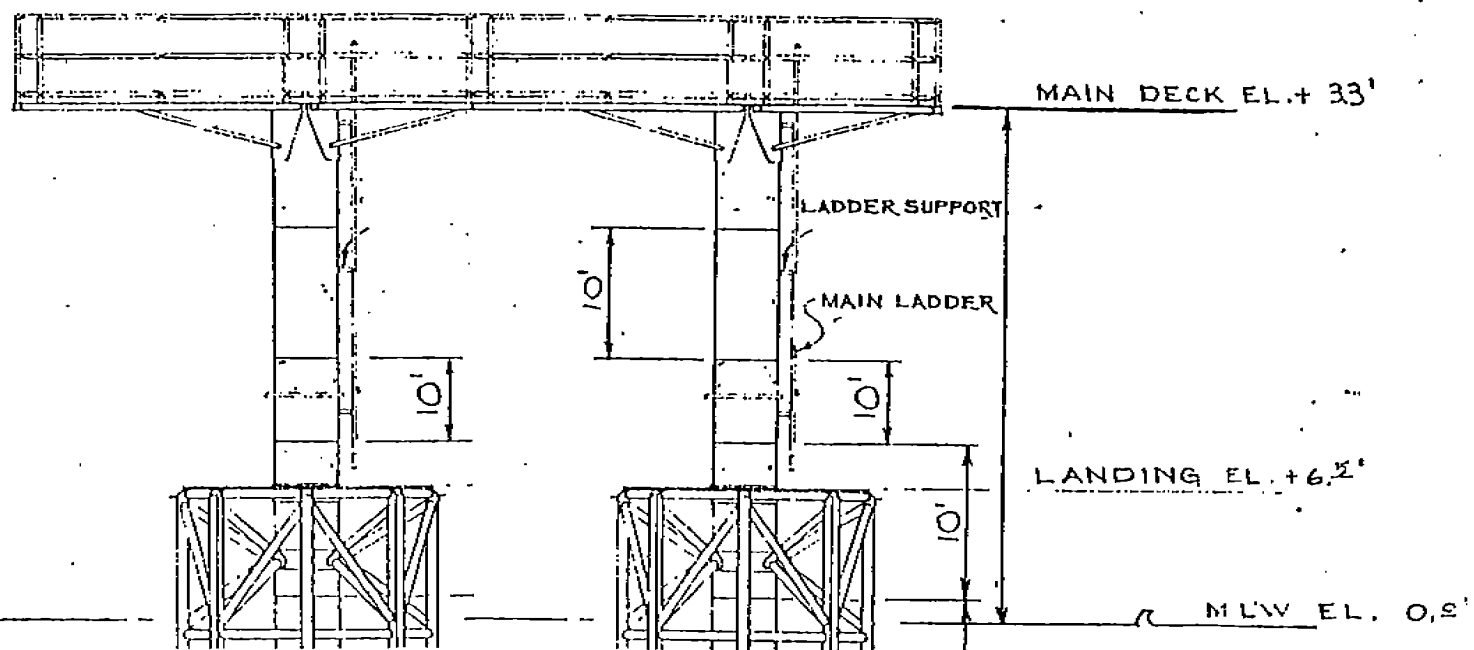
1 1

Printed: 2/16/01

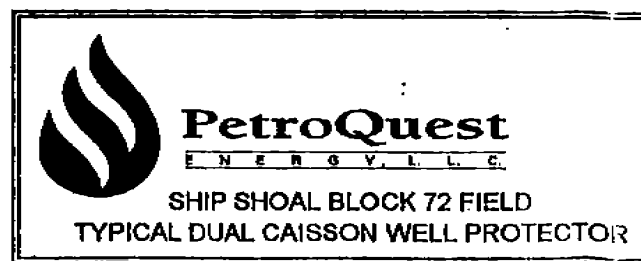
PQUE ACCELERATION WELL

WELL 72 #17 ST

BEST AVAILABLE COPY



ELEVATION
DUAL CAISSON TYPE WELL PROTECTOR



SECTION B

Contact
Project Name
New or Unusual
Technology
Bonding Information
Onshore Base and
Support Vessels
Lease Stipulations
Special Conditions

GENERAL INFORMATION

CONTACT

Inquiries may be made to the following authorized representative:

Connie Goers
J. Connor Consulting, Inc.
16225 Park Ten Place, Suite 700
Houston, Texas 77084
(281) 578-3388
e-mail address: connie@jccteam.com

PROJECT NAME

PetroQuest does not commonly refer to project names for their projects.

NEW OR UNUSUAL TECHNOLOGY

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

BONDING INFORMATION

In accordance with regulations contained in Title 30 CFR Part 256 and further clarified by that certain Notice to Lessees (NTL 00-G16) pertaining to general lease surety bonds, PetroQuest has on file with the Minerals Management Service a \$3,000,000 Areawide Development Bond.

Additionally, that certain 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 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 PetroQuest.

BEST AVAILABLE COPY

ONSHORE BASE AND SUPPORT VESSELS

The Ship Shoal Block 72 Unit area is located approximately 6.7 miles from the nearest Louisiana shoreline and approximately 12 miles from the onshore support base located in Morgan City, Louisiana. A Vicinity Plat showing the location of Ship Shoal Block 72 Unit area relative to the shoreline and onshore base is included as *Attachment B-1*.

PetroQuest will utilize onshore facilities located in Morgan City, Louisiana ~~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. The 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. 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.

Support vessels and travel frequency during the proposed drilling, completion and related production activities are as follows:

| Support Vessel | Drilling and Completion Trips Per Week | Production Trips Per Week |
|----------------|----------------------------------------|---------------------------|
| Crew Boat | 7 | 1 |
| Supply Boat | 5 | 0 |
| Helicopter | 4 | 1 |

Personal vehicles will be the main means of transportation to carry rig personnel from various locations to the Morgan City area. 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. The

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

During the proposed operations, PetroQuest and contractor personnel will be employed on the MODU conducting the drilling and potential completion activities. During these periods of time, approximately 35-50 personnel may be engaged in designated activities. Personnel engaged in onshore operations will be the dispatcher at the pre-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 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 Plan.

LEASE STIPULATIONS

Oil and gas exploration activities on 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.

Lease OCS 0060 was issued with Lease Stipulation No. 1 requiring preparation of a Cultural Resources Report.

This requirement provides protection of prehistoric archaeological resources by requiring remote sensing surveys in areas designated to have a high probability for archaeological resources and by requiring protection of archaeological resources discovered outside of the designated high probability zones.

As stated in Minerals Management Service Letter to Lessees (LTL) dated September 5, 1995, effective November 21, 1994, a final rule was published in the Federal Register which added a new section, 30 CFR 250.126, titled "Archaeological Reports and Surveys", to Minerals

Management Service Operating Regulations. This rule was developed to convert the requirements contained in Stipulation No. 1 into regulations which apply to all leases located within areas determined as having a high probability for the occurrence of archaeological resources.

Ship Shoal Block 72 has been designated by Minerals Management Service as an area having a high probability for archaeological resources, therefore requiring Cultural Resources Reports which were previously submitted by Mobil Exploration & Producing U.S. Inc. with Plans of Exploration.

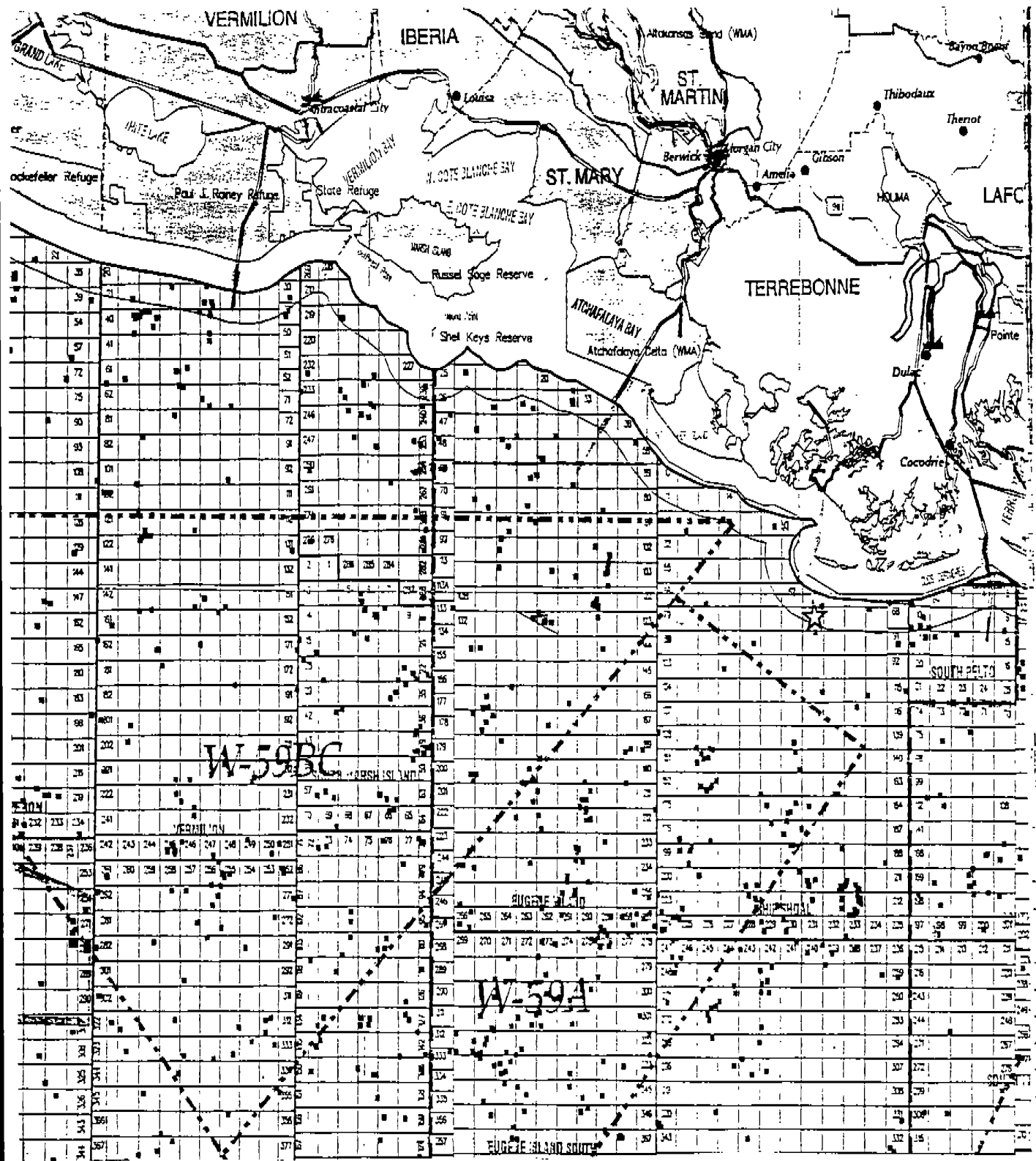
TOPOGRAPHIC FEATURES

The topographic features stipulation minimizes the likelihood of damage to the biota of the designated banks from routine OCS oil and gas activities. The topographic features provide habitat for coral reef community organisms. Through consultation and coordination between various Federal, State and local agencies, many such activities and their associated impacts are minimized by establishing "no activity" zone, "1000-meter zone", "1-mile zone" and "3-mile zone".

The proposed activities in Ship Shoal Block 72 Unit Area are not within the vicinity of an existing topographic feature.

SPECIAL CONDITIONS

Ship Shoal Block 72 Unit Area is located within the boundary of the "8G Zone" established for joint review by the designated state agency for comments on the proposed activity to determine if the activities impact a common reservoir(s) overlying state and federal acreage. Therefore, PetroQuest will submit the required surface and bottom hole location information to the Louisiana Governor's Office in order to make this determination.



6.7 MILES TO THE NEAREST
SHORELINE. THE ONSHORE
SHOREBASE IS LOCATED IN
MORGAN CITY, LOUISIANA.

BEST AVAILABLE COPY
PETROQUEST ENERGY ONE, L.L.C.

SHIP SHOAL BLOCK 72

VICINITY MAP

ATTACHMENT B-1

G & G INFORMATION

SECTION C

Structure Contour Maps
Trapping Features
Depth of Geopressure
Shallow Hazards and
Interpreted Seismic Lines
Geological Structure
Cross Sections
Shallow Hazards Report
Shallow Hazards
Assessment
High Resolution Seismic
Lines
Stratigraphic Column
Hydrogen Sulfide
Information

STRUCTURE CONTOUR MAP

A current structure map drawn to the top of the prospective hydrocarbon accumulation showing the surface and bottom hole locations of the subject well is included as *Attachment C-1*.

SHALLOW HAZARDS AND INTERPRETED SEISMIC LINES

The new drilling operations being proposed under this Plan will occur from an existing surface location previously approved under Plans of Exploration. Therefore, PetroQuest is not required to submit additional 2-D or 3-D migrated and annotated seismic data.

GEOLOGICAL STRUCTURE CROSS-SECTIONS

An interpreted geological cross-section is not required for this Plan since no seismic data is being submitted.

SHALLOW HAZARDS REPORT

Ship Shoal Block 72 Unit Area has experienced extensive satellite and platform sites and lease pipeline installations. Mobil previously contracted surveys to evaluate geologic conditions and inspect for potential hazards or constraints to lease development.

Copies of the reports have been previously submitted to the Minerals Management Service under separate cover.

SHALLOW HAZARDS ANALYSIS

The proposed operations will be conducted from existing surface

locations under previously approved Plans of Exploration; therefore a shallow hazards analysis is not required.

STRATIGRAPHIC COLUMN

A generalized biostratigraphic/lithostratigraphic column from the seafloor to the total depth of the proposed well is included as *Attachment C-4*.

TIME VERSUS DEPTH TABLES

PetroQuest's determination there is existing sufficient well control data for the target areas proposed in this plan; therefore, tables providing seismic time versus depth for the proposed well locations are not required.

HYDROGEN SULFIDE INFORMATION

PetroQuest is requesting the proposed target sands to be penetrated in the proposed wellbore be classified as absent of hydrogen sulfide.

BEST AVAILABLE COPY

SECTION D

*Maps
Analysis
Topographic Information*

BIOLOGICAL INFORMATION

CHEMOSYNTHETIC

The seafloor disturbing activities proposed in the Plan are in water depths less than 400 meters (1312 feet); therefore, this section of the plan is not applicable.

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 disturbing activities 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.

SECTION E

Wastes and Discharges

WASTES AND DISCHARGES INFORMATION

The disposal of oil and gas operational wastes is managed by USEPA through regulations established under three Federal Acts. The Resource Conservation and Recovery Act (RCRA) 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 by USEPA under the authority of the Clean Water Act. And, when injected underground, oil and gas operational wastes are regulated by USEPA's third ~~program, 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.

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.

PetroQuest has requested coverage under EPA Region VI NPDES General Permit GMG290000, which regulates overboard discharges, restrictions and limitations of waste generated from oil and gas operations in the Western Gulf of Mexico.

The types of discharges included in the permit application and the estimated average flow volumes are detailed below.

Drilling Fluids - Although drilling mud is generally recycled, excess mud is sometimes discharged overboard. The volume and rate of discharge depend upon downhole conditions. Volume is estimated from either 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.

Drill Cuttings - The drill cuttings are separated from the mud 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. The volume of cement discharges is calculated by subtracting the volume inside the well from the total volume pumped downhole.

Well Treatment, Completion or Workover Fluids - These fluids (primarily seawater that has been circulated downhole) are sometimes discharged when in excess. The discharge of workover, treatment and completion fluids is classified as an intermittent discharge, with an estimated average flow of 300 barrels a day during the affected operations period. The volume is calculated as for excess cement.

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. The rate of discharge from the marine sanitation unit is approximately 25 gallons/man/day. An equal amount of domestic waste (from sinks, galleys, showers, laundries and ground food wastes) 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 blowdown. 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.

Produced Water from Well Testing - This discharge would occur during the production test conducted during well drilling operations.

Much of the produced water would be vaporized as the gas is burned. Excess water would be processed in a gravity separator and discharged in accordance with the limitations and conditions of the applicable NPDES Individual Permit.

Domestic wastes such as wastewater originating from sinks, showers, laundries, and galleys are typically discharged overboard, and may be routed through a comminuter so that the discharge will not result in any floating solids. Sanitary wastes are composed of human body waste from toilets and urinals. The MODU and marine supply vessels are equipped ~~with sewage treatment~~ facilities. A typical MODU may discharge approximately 25 gal/man/day of domestic and treated sanitary waste. These wastes are expected to rapidly dilute and disperse.

Rig wash and deck drainage discharges are monitored for visual sheens, and in some instances by the oil and grease content. The quantities from the MODU should be relatively low during the proposed drilling and completion operations.

Ballast water used in the pre-loading of certain rig types is a one-time event, and is estimated to run at approximately 1,200,000 gallons. The seawater is isolated and not exposed to contaminants. Cooling water for the drilling rig is designed so there is no contact with machinery. It is expected that approximately 336,000 gallons per day will be discharged.

Operational discharges from the supply vessels include bilge and ballast waters and potential fuel oil releases. MARPOL 73/78 has significantly limited operational discharges. The support vessel may still discharge oily bilge water, but their treatment process must severely limit the oil content. Approximately 22,000 liters/day could potentially be discharged from these vessels.

Wastes not discharged overboard will be transported to an appropriate treatment or disposal site, in accordance with all Federal, State and Local rules and regulations.

Included as *Attachments E-1 and E-2* are the typical mud components used in the proposed activities, and the estimated quantity and rates of discharges applicable to the drilling fluids/cuttings based on hole size interval and washout.

Solid domestic wastes will be transported to shore for proper disposal at an authorized disposal site, and sewage will be treated on location by U. S. Coast Guard approved marine sanitation devices.

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 major wastes generated will 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).

MARPOL 73/78, implemented by the U.S. Coast Guard, requires preparation, monitoring and record keeping requirements for garbage generated on floating and fixed facilities in OCS Federal Waters. The drilling contractor will 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.

**DRILLING FLUID ADDITIVES
PRODUCT CROSS REFERENCE**

| MILPARK | BAROID | M-I | DESCRIPTION |
|--------------------------------------|----------------------|-----------------|---------------------------------------------------|
| WEIGHT MATERIALS | | | |
| MIL-BAR | BAROID | M-I BAR | API bante, 4.2 specific gravity |
| DENSIMIX | BARODENSE | FER-OX | Macaceous nematite |
| W.O. 30 | BARACARB | LO-WATE | Calcium carbonate |
| VISCOSIFIERS | | | |
| MILGEL | AQUAGEL | M-I GEL | API-grade Wyoming bentonite |
| MILGEL NT | AQUAGEL GOLD SEAL | | Untreated Wyoming bentonite |
| SALTWATER GEL | ZEOGEL | SALT GEL | API-grade attapulgite |
| SUPER-COL | QUIK-GEL | KWIK-THIK | High-yield bentonite, treated |
| NEW-VIS | | | Organic polymer blend |
| XCD POLYMER | XCD POLYMER | XCD POLYMER | XC Dispersable |
| MIL-BEN | SHUR-GEL | | Bentonite-OCMA Spec. DFCP4 |
| DEFOCCULANTS | | | |
| MIL-TEMP | THERMA-THIN DP | MELANEX-T | High-temperature deflocculant |
| NEW-THIN | THERMA-THIN | TACKLE (Liquid) | Polymeric deflocculant |
| UNI-CAL | Q-BROXIN | SPERSENE | Chrome lignosulfonate |
| UNI-CAL CF | Q-B II | SPERSENE CF | Chrome-free lignosulfonate |
| MIL-KEM | LIGNOX | RD 2000 | Lime mud thinner |
| SAPP | SAPP | SAPP | Sodium acid pyrophosphate |
| OILFOS | BARAFOS | PHOS | Sodium tetraphosphate |
| MIL-THIN | THERMA-THIN | THIN X (Liquid) | Anionic copolymer thinner |
| FILTRATION CONTROL AGENTS | | | |
| BIO-LOSE | | | Modified polysacchande |
| CHEMTROL X | DURENEX | RESINEX | Polymer blend, high-temperature |
| FILTREX | BARANEX | RESINEX | Polyanionic lignin resin |
| LIGCO | CARBONOX | TANNATHIN | Lignite |
| LIGCON | CC-16 | CAUSTILIG | Causticized lignite |
| MILSTARCH | IMPERMEX | MY-LO-GEL | Pregelatinized starch |
| NEW-TROL | POLYAC | SP-101 | Sodium polyacrylate |
| PERMA-LOSE HT | DEXTRID | POLY-SAL | Nonfermenting starch, high-temp. |
| PYRO-TROL | THERMA-CHEK | POLY RX | Polymeric, high-temperature |
| KEM-SEAL | THERMA-CHEK | | Copolymer, high-temperature |
| MIL-PAC | PAC R | POLYPAC | Polyanionic cellulose |
| MIL-PAC LV | PAC L | POLYPAC | Low-viscosity polyanionic cellulose |
| MILPARK CMC HV | CELLEX (High Vis) | CMC HV | Sodium carboxymethylcellulose |
| MILPARK CMC LV | CELLEX | CMC LV | Sodium carboxymethylcellulose |
| CORROSION CONTROL CHEMICALS | | | |
| MIL-GARD | NO-SULF | SULF-X | Basic zinc carbonate |
| MIL-GARD R | BARASCAV-L | SULF-X ES | Chelated zinc |
| NOXYGEN | COAT-888 | OXYGEN | Oxygen scavenger |
| | BARACOR 113 | SCAVENGER | |
| SCALE-BAN | SURFLO-H35 | SI-1000 | Scale inhibitor |
| | BARACOR 129 | | |
| AMI-TEC | BARA FILM | CONQOR 202 | Film-forming amine |
| | BARACOR 300 | CONQOR 101 | |
| | COAT-B1400 | CONQOR 303 | |
| | COAT-C1815 | | |
| CARBO-DRILL OIL MUD ADDITIVES | | | |
| CARBO-MUL | INVERMUL NT | VERSAWET | Emulsifier (and wetting agent) primarily |
| | VERSACOAT | | |
| CARBO-MUL HT | EZ MUL NT | | High-temperature emulsifier and wetting agent |
| CARBO-TEC | INVERMUL | VERSAMUL | Emulsifier |
| CARBO-GEL | GELTONE II | VERSAGEL | Organophilic clay nectonte |
| CARBO-VIS | GELTONE II | VERSAMOD | Organophilic clay |
| CARBO-TROL | | VERSATROL | Filtration control agent |
| CARBO-TROL A-9 | DURATONE HT | VERSALIG | Nonasphaltic filtration control, high-temperature |
| SURF-COTE | DRILTREAT or OMC | VERSAWET | Oil wetting agent for oil muds |
| CARBO-MIX | DRILTREAT | | Nonionic emulsifier, high-activity |
| CARBO-TEC HW | | | HW oil mud emulsifier |

BEST AVAILABLE COPY

DRILLING FLUID ADDITIVES **PRODUCT CROSS REFERENCE**

| MILPARK | BAROID | M-I | DESCRIPTION |
|------------------------------------------------|-------------------------------|----------------------|---------------------------------------------------------|
| SHALE CONTROL ADDITIVES | | | |
| ALPLEX | | | Aluminum complex |
| BIO-DRILL 1402 | | | Oil mud alternative |
| NEW-DRILL | EZ MUD | POLY-PLUS | PHPA liquid |
| NEW-DRILL HP | | | Powdered PHPA |
| NEW-DRILL PLUS | EZ MUD DP | | Powdered PHPA |
| SHALE-BOND | SHALE-BAN | HOLECOAT | Resinous shale stabilizer |
| PROTECTOMAGIC | | | Oil-soluble blown asphalt |
| PROTECTOMAGIC M | AK-70 | STABIL-HOLE | Water-dispersants. Blown asphalt |
| SPOTTING FLUIDS | | | |
| BLACK MAGIC | | | Oil-base spotting fluid |
| BLACK MAGIC LT | EX SPOT | | Low toxicity oil-base spotting fluid |
| BLACK MAGIC SFT | | OIL-FAZE | Oil-base spotting fluid concentrate |
| MIL-FREE | SCOT-FREE/ ENVIRO-SPOT | PIPE-LAX | Liquid spotting fluid |
| BIO-SPOT | ENVIRO-SPOT | | Nontoxic water-base spotting fluid |
| BIO-SPOT II | | | Nontoxic water-base spotting fluid |
| MIL-SPOT 2 | SCOT-FREE | PIPE-LAX W | Weighted (oil-base) spotting fluid concentrate |
| LUBRICANTS | | | |
| AQUA-MAGIC | | | Low-toxicity lubricant |
| LUBRI-FILM | EP MUDLUBE | E.P. LUBE | Extreme-pressure lubricant |
| MIL-LUBE | | LUBE-106 | General lubricant |
| DETERGENTS/FOAMERS | | | |
| AMPLI-FOAM | DRILFOAM | FOAMER 80 | Mist and stiff foaming agent |
| MIL CLEAN | BAROID RIG WASH BARA-KLEAN | KLEEN-UP | Biodegradeable detergent |
| MILPARK MD | CON-DET | DD | Drilling detergent |
| DEFOAMING AGENTS | | | |
| LD-8 | BARA DEFOAM | DEFOAM-X | Hydrocarbon-base defoamer |
| W.O. DEFOAM | BARA BRINE DEFOAM | DEFOAM-A | Alcohol-base, saltwater muds |
| ALUMINUM STEARATE | Aluminum Stearate | Aluminum Stearate | Aluminum Stearate |
| LOST-CIRCULATION MATERIALS | | | |
| CHEK-LOSS | | | Seepage loss control differential sticking preventative |
| MIL-CEDAR FIBER | PLUG-GIT | M-I CEDAR FIBER | Cedar fiber |
| MIL-FIBER | FIBERTEX | M-I FIBER | Fiber blend |
| MILFLAKE | JELFLAKE | FLAKE | Shredded cellophane flake |
| MILMICA | MICATEX | MICA | (Muscovite) mica graded |
| MIL-PLUG | | NUT PLUG | Ground pecan shells |
| MIL-SEAL | BARO-SEAL | KWIK SEAL | Blended lost-circulation material |
| COTTONSEED HULLS | Cottonseed Hulls | Cottonseed Hulls | Cottonseed Hulls |
| PAPER | | | Ground paper |
| WALNUT SHELLS | WALL-NUT | | Ground walnut shells |
| MAGNE-SET | | | Acid-soluble cement |
| WORKOVER AND COMPLETION FLUID ADDITIVES | | | |
| MUD-PAC | COAT-44 & 45 | CONQOR 404 X-CORE | Corrosion (packer fluid) inhibitor |
| BRINE-PAC | BARACOR-A | | Corrosion inhibitor clean brine fluids |
| W.O. 21L | LIQUI-VIS | VIS-L | Liquid HEC polymer |
| PRESERVATIVES | | | |
| DRYOCIDE | | | Dry (biodegradable) biocide |
| X-CIDE 207 | BARA B466 | BACBAN II & III | Biocide |

X-CIDE 207 is a registered trademark of Petrolite Corporation.
 DRYOCIDE is a registered trademark of Nalco Chemical Company
 XCD (in XCD POLYMER) is a registered trademark of Marck & Co., Inc.
 OILFOS is a registered trademark of Monsanto Company.

SECTION F

***Oil Spill Response
Chemical Information***

OIL SPILL RESPONSE AND CHEMICAL INFORMATION

PetroQuest Energy One, L.L.C. (PetroQuest) is the only entity covered in their Regional Oil Spill Response Plan (OSRP) approved on November 2, 2000. Activities proposed in this Development Operations Coordination Document (DOCD) will be covered by the Regional OSRP.

PetroQuest'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 in CGA's bases located in Houma, Louisiana would be transported to a staging area in Morgan City or Dulac, Louisiana.

Since PetroQuest has the capability to respond to the WCD spill scenario included in its Regional OSRP approved on November 2, 2000, and since the WCD scenario determined for our DOCD does not replace the WCD scenario

in our Regional OSRP, I hereby certify that PetroQuest has the capability to respond, to the maximum extent practicable, to a WCD resulting from the activities proposed in our DOCD.

AIR EMISSIONS INFORMATION

SECTION G

Air Emission 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 as oil spills or blowouts.

Primary air ~~pollutants~~ associated with OCS activities are nitrogen oxides, carbon monoxide, sulphur oxides, volatile organic compound, and suspended particulate.

Included in this section is the Projected Air Quality Emissions Report prepared in accordance with Appendix H of that certain Notice to Lessees (No. 2000-G21) addressing drilling and completion operations, construction activities related to installation of the well protector structure and lease pipeline, and associated production emissions.

DOCD AIR QUALITY SCREENING CHECKLIST

OMB Control No. xxxx-xxxx
Expiration Date: Pending

| | | |
|-----------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| COMPANY | PETROQUEST ENERGY ONE, L.L.C. | |
| AREA | SHIP SHOAL | |
| BLOCK | 72 | |
| LEASE | OCS 0060 | |
| PLATFORM | J | |
| WELL | AA | |
| COMPANY CONTACT | CONNIE GOERS | |
| TELEPHONE NO. | 281-578-3388 | |
| REMARKS | DRILL, COMPLETE AND PRODUCE WELL LOCATION AA, INSTALL LEASE PIPELINE AND CAISSON. | |
| "Yes" | "No" | Air Quality Screening Questions |
| | X | 1. Is the concentration of H ₂ 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 | | |
| 2004 | | |
| 2005 | | |
| 2006 | | |
| 2007 | | |
| 2008 | | |
| 2009 | | |

BEST AVAILABLE COPY

AIR EMISSION CUMPUTATION FACTORS

OMB Control No. xxxx-xxxx
Expiration Date: Pending

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

| Equipment/Emission Factors | units | PM | SOx | NOx | VOC | CO | REF. | DATE |
|----------------------------|--------------|-------|---------|------|--------|-------|--------------------------|-------|
| NG Turbines | gms/hp-hr | | 0.00247 | 1.3 | 0.01 | 0.83 | AP42 3.2-1& 3.1-1 | 10/96 |
| NG 2-cycle lean | gms/hp-hr | | 0.00185 | 10.9 | 0.43 | 1.5 | AP42 3.2-1 | 10/96 |
| NG 4-cycle lean | gms/hp-hr | | 0.00185 | 11.8 | 0.72 | 1.6 | AP42 3.2-1 | 10/96 |
| NG 4-cycle rich | gms/hp-hr | | 0.00185 | 10 | 0.14 | 8.6 | AP42 3.2-1 | 10/96 |
| | | | | | | | | |
| Diesel Recip. < 600 hp. | gms/hp-hr | 1 | 1.468 | 14 | 1.12 | 3.03 | AP42 3.3-1 | 10/96 |
| Diesel Recip. > 600 hp. | gms/hp-hr | 0.32 | 1.468 | 11 | 0.33 | 2.4 | AP42 3.4-1 | 10/96 |
| Diesel Boiler | lbs/bbl | 0.084 | 2.42 | 0.84 | 0.008 | 0.21 | AP42 1.3-12,14 | 9/98 |
| | | | | | | | | |
| NG Heaters/Boilers/Burners | lbs/mmescf | 7.6 | 0.593 | 100 | 5.5 | 84 | AP42 1.4-1, 14-2, & 14-3 | 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 |

AIR EMISSIONS CALCULATIONS - THIRD YEAR

OMB Control No. xxxx-xxxx
Expiration Date: Pending

| COMPANY | AREA | BLOCK | LEASE | PLATFORM | WELL | CONTACT | PHONE | REMARKS | | | | | | | | | |
|----------------------------|------------------------------|----------|-----------|-----------|----------|--------------|-------------------------|---------|--------|-------|--------|----------------|--------|--------|--------|----------|--|
| PETROQUEST ENERGY | SHIP SHOAL | 72 | OCS 0060 | J | AA | CONNIE GOERS | 281-878-3388 | #REF! | | | | | | | | | |
| OPERATIONS | EQUIPMENT | RATING | MAX. FUEL | ACT. FUEL | RUN TIME | | MAXIMUM POUNDS PER HOUR | | | | | ESTIMATED TONS | | | | | |
| | Diesel Engines | HP | GAL/HR | GAL/D | | | | | | | | | | | | | |
| | Nat. Gas Engines | HP | SCF/HR | SCF/D | | | | | | | | | | | | | |
| | Burners | MMBTU/HR | SCF/HR | SCF/D | HR/D | DAYS | PM | SOx | NOx | VOC | CO | PM | SOx | NOx | VOC | CO | |
| DRILLING MARINE 300 | PRIME MOVER>600hp diesel | 4500 | 217.35 | 5216.40 | 24 | 45 | 3.17 | 14.55 | 109.03 | 3.27 | 23.79 | 1.71 | 7.86 | 58.88 | 1.77 | 12.85 | |
| | PRIME MOVER>600hp diesel | 0 | 0 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| | PRIME MOVER>600hp diesel | 0 | 0 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| | PRIME MOVER>600hp diesel | 0 | 0 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| | BURNER diesel | 0 | | | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| | AUXILIARY EQUIP<600hp diesel | 1010 | 48.783 | 1170.79 | 24 | 45 | 2.22 | 3.27 | 31.15 | 2.49 | 6.74 | 1.20 | 1.76 | 16.82 | 1.35 | 3.64 | |
| | VESSELS>600hp diesel(crew) | 2065 | 99.7395 | 2393.75 | 10 | 45 | 1.46 | 6.68 | 50.03 | 1.50 | 10.92 | 0.33 | 1.50 | 11.26 | 0.34 | 2.46 | |
| | VESSELS>600hp diesel(supply) | 2065 | 99.7395 | 2393.75 | 6 | 32 | 1.46 | 6.68 | 50.03 | 1.50 | 10.92 | 0.14 | 0.64 | 4.80 | 0.14 | 1.05 | |
| VESSELS>600hp diesel(tugs) | 0 | 0 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| PIPELINE INSTALLATION | PIPELINE LAY BARGE diesel | 4600 | 222.18 | 5332.32 | 12 | 11 | 3.24 | 14.87 | 111.45 | 3.34 | 24.32 | 0.21 | 0.98 | 7.36 | 0.22 | 1.60 | |
| | SUPPORT VESSEL diesel | 3500 | 169.05 | 4057.20 | 12 | 11 | 2.47 | 11.32 | 84.80 | 2.54 | 18.50 | 0.16 | 0.75 | 5.60 | 0.17 | 1.22 | |
| | PIPELINE BURY BARGE diesel | 2065 | 99.7395 | 2393.75 | 12 | 11 | 1.46 | 6.68 | 50.03 | 1.50 | 10.92 | 0.10 | 0.44 | 3.30 | 0.10 | 0.72 | |
| | SUPPORT VESSEL diesel | 0 | 0 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| | VESSELS>600hp diesel(crew) | 0 | 0 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| | VESSELS>600hp diesel(supply) | 0 | 0 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| FACILITY INSTALLATION | DERRICK BARGE diesel | 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 | |
| INSTALLED WITH MODU | | | | | | | | | | | | | | | | | |
| PRODUCTION | RECIP.<600hp diesel-CRANE | 40 | 1.932 | 46.37 | 2 | 365 | 0.09 | 0.13 | 1.23 | 0.10 | 0.27 | 0.03 | 0.05 | 0.45 | 0.04 | 0.10 | |
| PLATFORM J | 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-CREW | 2065 | 99.7395 | 2393.75 | 10 | 52 | 1.46 | 6.68 | 50.03 | 1.50 | 10.92 | 0.38 | 1.74 | 13.01 | 0.39 | 2.84 | |
| | 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 | |
| | 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 | |
| | 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 | |
| | 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 | |
| | BURNER nat gas | 0.75 | 714.29 | 17142.88 | 24 | 365 | 0.01 | 0.00 | 0.07 | 0.00 | 0.06 | 0.02 | 0.00 | 0.31 | 0.02 | 0.26 | |
| | MISC. | BPD | SCF/HR | COUNT | | | | | | | | | | | | | |
| | TANK- | 0 | | | 0 | 0 | | | | 0.00 | | | | | 0.00 | | |
| | FLARE- | | 0 | | 0 | 0 | | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 | |
| | PROCESS VENT- | | 0 | | 0 | 0 | | | | 0.00 | | | | 0.00 | | | |
| | FUGITIVES- | | | 500.0 | | 365 | | | | 0.25 | | | | 1.10 | | | |
| GLYCOL STILL VENT- | | 0 | | 0 | 0 | | | | 0.00 | | | | 0.00 | | | | |
| DRILLING | OIL BURN | 0 | | | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| WELL TEST | GAS FLARE | | 0 | | 0 | 0 | | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 | |
| 2001 YEAR TOTAL | | | | | | | 17.82 | 70.85 | 537.87 | 18.01 | 117.34 | 4.29 | 15.72 | 121.78 | 5.62 | 26.73 | |
| EXEMPTION CALCULATION | DISTANCE FROM LAND IN MILES | | | | | | | | | | | 223.11 | 223.11 | 223.11 | 223.11 | 12083.59 | |
| | 67 | | | | | | | | | | | | | | | | |

AIR EMISSIONS CALCULATIONS - FOURTH YEAR

OMB Control No. xxxx-xxxx
Expiration Date: Pending

| COMPANY | AREA | BLOCK | LEASE | PLATFORM | WELL | | CONTACT | | PHONE | REMARKS | | | | | | |
|------------------------------|----------------------------------------------------------------------|----------|-----------|-----------|----------|------|-------------------------|------|--------------|---------|-------|----------------|--------|--------|--------|----------|
| PI TROQUEST ENERGY C | SHIP SHOAL | 72 | OCS 0060 | J | AA | | CONNIE GOERS | | 281-578-3388 | #REF! | | | | | | |
| OPERATIONS | EQUIPMENT | RATING | MAX. FUEL | ACT. FUEL | RUN TIME | | MAXIMUM POUNDS PER HOUR | | | | | ESTIMATED TONS | | | | |
| | Diesel Engines | HP | GAL/HR | GAL/D | | | | | | | | | | | | |
| | Nat. Gas Engines | HP | SCF/HR | SCF/D | | | | | | | | | | | | |
| | Burners | MMBTU/HR | SCF/HR | SCF/D | HR/D | DAYS | PM | SOx | NOx | VOC | CO | PM | SOx | NOx | VOC | CO |
| DRILLING | PRIME MOVER>600hp diesel | 0 | 0 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | PRIME MOVER>600hp diesel | 0 | 0 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | PRIME MOVER>600hp diesel | 0 | 0 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | PRIME MOVER>600hp diesel | 0 | 0 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | BURNER diesel | 0 | | | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | AUXILIARY EQUIP<600hp diesel | 0 | 0 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | VESSELS>600hp diesel(crew) | 0 | 0 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | VESSELS>600hp diesel(supply) | 0 | 0 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | VESSELS>600hp diesel(lugs) | 0 | 0 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| PIPELINE INSTALLATION | PIPELINE LAY BARGE diesel | 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 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | VESSELS>600hp diesel(supply) | 0 | 0 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| FACILITY INSTALLATION | DERRICK BARGE diesel | 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 |
| PRODUCTION PLATFORM J | RECIP.<600hp diesel | 40 | 1 932 | 46 37 | 2 | 365 | 0.09 | 0.13 | 1.23 | 0.10 | 0.27 | 0.03 | 0.05 | 0.45 | 0.04 | 0.10 |
| | 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 -CREW | 2065 | 99.7395 | 2393.75 | 10 | 52 | 1.46 | 8.68 | 50.03 | 1.50 | 10.92 | 0.38 | 1.74 | 13.01 | 0.39 | 2.84 |
| | 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 | 0.75 | 714.29 | 17142.86 | 24 | 365 | 0.01 | 0.00 | 0.07 | 0.00 | 0.06 | 0.02 | 0.00 | 0.31 | 0.02 | 0.26 |
| | MISC. | BPD | SCF/HR | COUNT | | | | | | | | | | | | |
| | TANK- FLARE- PROCESS VENT- FUGITIVES- GLYCOL STILL VENT- | 0 | 0 | 0 | 0 | 0 | | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | 0 | 0 | 0 | 0 | | | | 0.00 | | | | 0.00 | | |
| | | | 0 | 500.0 | 0 | 365 | | | | 0.25 | | | | 1.10 | | |
| | | | 0 | 0 | 0 | 0 | | | | 0.00 | | | | 0.00 | | |
| DRILLING WELL TEST | OIL BURN | 0 | | | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | GAS FLARE | | 0 | | 0 | 0 | | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 |
| 2002 YEAR TOTAL | | | | | | | 1.55 | 6.81 | 51.34 | 1.85 | 11.24 | 0.43 | 1.79 | 13.77 | 1.54 | 3.20 |
| EXEMPTION CALCULATION | DISTANCE FROM LAND IN MILES | | | | | | | | | | | 223.11 | 223.11 | 223.11 | 223.11 | 1:083.58 |
| | 6.7 | | | | | | | | | | | | | | | |

AIR EMISSION CALCULATIONS

OMB Control No. xxxx-xxxx

Expiration Date: Pending

| COMPANY | AREA | BLOCK | LEASE | PLATFORM | WELL |
|-------------------|-------------------|--------|----------|----------|----------|
| PETROQUEST ENERGY | SHIP SHOAL | 72 | OCS 0060 | J | AA |
| Year | Emitted Substance | | | | |
| | PM | SOx | NOx | VOC | CO |
| 1999 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2000 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2001 | 4.29 | 15.72 | 121.78 | 5.62 | 26.73 |
| 2002 | 0.43 | 1.79 | 13.77 | 1.54 | 3.20 |
| 2003 | 0.43 | 1.79 | 13.77 | 1.54 | 3.20 |
| Allowable | 223.11 | 223.11 | 223.11 | 223.11 | 12083.58 |

SECTION H

***Environmental
Information***

ENVIRONMENTAL INFORMATION

An Environmental Report is not required for the proposed supplemental development operations.

SECTION I

***Coastal Zone Consistency
Certification***

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 modifications, 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.

A certificate of ~~Coastal Zone Management~~ Consistency for the State of Louisiana is not required for the supplemental development activities.

BEST AVAILABLE COPY