In Reply Refer To: MS 5231

June 5, 1992

Zilkha Energy Company
Attention: Mr. Steve Brunner
1201 Louisiana Street, Suite 3200
Houston, Texas 77002-5223

Gentlemen:

Reference is made to the following plan received May 22, 1992:

Type Plan - Initial Plan of Exploration
Lease - OCS-G 9565
Block - 266
Area - South Marsh Island
Activities Proposed - Well A

In accordance with 30 CFR 250.33, this plan is hereby deemed submitted and is now being considered for approval.

Your control number is N-4302 and should be referenced in your communication and correspondence concerning this plan.

Sincerely,

(Orig. Sgd.) A. Donald Giroir

D. J. Bourgeois
Regional Supervisor
Field Operations

bcc: Lease OCS-G 9565 POD File (MS 5032)
MS 5034 w/public info. copy of the plan and accomp. info.

MTolbert:cic:05/26/92:POECOM

ZILKHA ENERGY COMPANY

May 19, 1992

Mr. Daniel J. Bourgeois
Regional Supervisor
Office of Field Operations
U.S. Department of the Interior
Minerals Management Service
1201 Elmwood Park Boulevard
New Orleans, LA 70123-2394

RE: Initial Plan of Exploration
Lease OCS-G 9565, South Marsh Island Block 266
OCS Federal Waters, Gulf of Mexico, Offshore, Louisiana

Gentlemen:

In accordance with the provisions of Title 30 CFR 250.33, Zilkha Energy Company (Zilkha) hereby submits for your review and approval nine (9) copies of an Initial Plan of Exploration for Lease OCS-G 9565, South Marsh Island Block 266, Offshore, Louisiana. Five (5) copies are "Proprietary Information" and four (4) copies are "Public Information".

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

Zilkha anticipates commencing activities under this proposed Initial Plan of Exploration on approximately August 1, 1992.

Should additional information be required, please contact Zilkha's regulatory agent, J. Connor Consulting, Inc., Attention: Connie Goers at (713) 558-0607.

Sincerely,

ZILKHA ENERGY COMPANY

"Public Information"

Steve Brunner
Operations Manager

SB:CJG
Enclosures

(SM266.POE.)cjg

1201 LOUISIANA STREET SUITE 3200 • HOUSTON, TEXAS 77002-5223
TELEPHONE (713) 655-5900 • TELECOPIER (713) 655-5961
TELEX 798-679

ZILKHA ENERGY COMPANY

INITIAL PLAN OF EXPLORATION

LEASE OCS-G 9565

SOUTH MARSH ISLAND BLOCK 266

Zilkha Energy Company (Zilkha), as designated Operator of the subject lease, submits this proposed Initial Plan of Exploration Plan in accordance with the regulations contained in Title 30 CFR 250.33 and more specifically defined in the Minerals Management Service Letters to Lessees and Operators dated October 12, 1988 and September 5, 1989.

HISTORY OF LEASE

Lease OCS-G 9565 was acquired by Shell Offshore, Inc. at Central Gulf of Mexico Lease Sale 113 held March 30, 1988.

SCHEDULE OF OPERATIONS

Under this Initial Plan of Exploration, Zilkha proposes the drilling of one (1) exploratory well. Planned commencement date is approximately August 1, 1992, subject to the approval of this Initial Plan of Exploration and issuance of the required Permit to Drill.

It should be emphasized that this schedule is tentative in the meaning of Title 30 CFR 250.33-1. Additional exploratory drilling must be predicated upon the need to further define the structures and/or reservoir limitations.

In addition to the drilling of the subject well, other activities which may be conducted under this Plan are the setting of a well protector type structure, a seafloor template, a velocity survey in a wellbore, and the collection of soil borings.

DESCRIPTION OF DRILLING UNIT

The proposed well will be drilled with a typical jack-up drilling rig. When a rig is selected, the rig specifications will be made a part of the Application for Permit to Drill. Typical Diverter and BOP Schematics are included as Attachments A-1 and A-2.

Safety features will include well control and blowout prevention equipment as described in Title 30 CFR 250.50. The appropriate life rafts, life jackets, ring buoys, etc., as prescribed by the U. S. Coast Guard will be maintained on the facility at all times.

WELL LOCATIONS

The approximate location of the proposed well in this Initial Plan of Exploration is shown on the Well Location Table and accompanying Well Location Plat included as Attachments B-1 and B-2.

STRUCTURE MAP

A current structure map drawn to the top of each prospective hydrocarbon accumulation showing the surface and bottom hole location of the proposed well is included as Attachment C.

BATHYMETRY MAP

A bathymetry map showing the proposed surface location in South Marsh Island Block 266 is included as Attachment D.

SHALLOW HAZARDS

A shallow hazards analysis has been prepared for the proposed surface location in South Marsh Island Block 266, evaluating any seafloor and subsurface geologic and manmade features and conditions and is included as Attachment E.

OIL SPILL CONTINGENCY PLAN

All drilling and construction operations shall be performed in accordance with industry standards to prevent pollution of the environment. Zilkha Energy Company's Oil Spill Contingency Plan has been approved by MMS. This plan designates an Oil Spill Response Team consisting of Zilkha personnel and contract personnel. This team's duties are to eliminate the source of any spill, remove all sources of possible ignition, deploy the most reliable means of available transportation to monitor the movement of a slick, and contain and remove the slick if possible.

Zilkha is a member of Clean Gulf Associates (CGA). The CGA stores pollution control equipment at two locations in Texas, at Port Aransas and Galveston; five locations in Louisiana, at

Venice, Grand Isle, Intracoastal City, Houma and Cameron and one location in Alabama, at Theodore.

Each base is equipped with fast response skimmers and there is a barge mounted high volume open sea skimmer based at Grand Isle, Louisiana. In addition to providing equipment, the CGA also supplies advisors for clean-up operations. Equipment available from CGA and the base it is located at is listed in the CGA Manual, Volume I, Section III.

Zilkha will make every effort to see that a spill is responded to as quickly as possible. Response equipment and response times will be suitable for anticipated environmental conditions in the area.

In good weather conditions fast response with oil boom, skimmers, pump and storage tanks would require approximately 9 to 10 hours, including preparation time as indicated below. A heavy equipment system response would require approximately 24-36 hours, including 6 hours preparation time.

		Hours
1.	Utilize boat under contract or procure a boat and deploy to nearest CGA Base in Intracoastal City, LA	1.5
2.	Load out Fast Response Unit	1.5
4.	Travel time	
	(Inland Travel Time)	2.0
	(Travel Time to Spill Site)	4.0
	Estimated Total Time	9.0

Equipment located in Intracoastal City, Louisiana would be utilized first with additional equipment transported from the nearest equipment base as required.

In the event a spill occurs from the proposed surface location in South Marsh Island Block 266, our company has projected trajectory of a spill impacting the coastline, utilizing information in the Environmental Impact Statement (EIS) for OCS Lease Sales 139 and 141.

The EIS contains oil spill trajectory simulations using seasonal surface currents coupled with wind data, adjusted every 3 hours for 30 days or until a target is contacted.

Hypothetical spill trajectories were simulated for each of the potential launch sites across the entire Gulf. These simulations presume 500 spills occurring in each of the four

seasons of the year. The results in the EIS were presented as probabilities that an oil spill beginning from a particular launch site would contact a certain land segment within 3, 10, or 30 days.

Utilizing the summary of the trajectory analysis (for 10 days), the probability of a oil spill impacting a land fall is as follows:

Area/Block	Landfall Segment	%	CGA Map No.
S. Marsh Island 266	Cameron Parish, LA	2	LA Map 5
	Vermilion Parish, LA	25	LA Map 5/6
	New Iberia Parish, LA	6	LA Map 6
	St. Mary's Parish, LA	1	LA Map 6

If a spill should occur from the proposed location, Zilkha would immediately activate its Oil Spill Response Team, determine from current conditions the probable location and time of land fall by contacting Continental Shelf Associates and/or the National Oceanic Atmospheric Administration's (NOAA) Gulf of Mexico Scientific Support Coordinator (SSC), for assistance in predicting spill movement. Then, using the Clean Gulf Operations Manual, Volume II, identify the biologically sensitive area and determine the appropriate response mode.

Volume II, Sections V and VI of the CGA Manual contains maps as listed above, equipment containment/cleanup protection response modes for the sensitive areas and depicts the protection response modes that are applicable for oil spill clean-up operations. Each response mode is schematically represented to show optimum deployment and operation of the equipment in areas of environmental concern. Implementation of the suggested procedures assures the most effective use of the equipment and will result in reduced adverse impact of oil spills on the environment. Supervisory personnel have the option to modify the deployment and operation of equipment to more effectively respond to site-specific circumstances.

NEW OR UNUSUAL TECHNOLOGY

No new techniques or unusual technology will be required for these operations.

LEASE STIPULATIONS

Lease Stipulation No. 1 requires preparation of a Cultural Resources Report assessing the potential existence of any cultural resources. A copy of this report is being submitted with the Initial Plan of Exploration.

DISCHARGES

All discharges associated with the drilling of the proposed well will be in accordance with the permit limitations addressed in the Environmental Protection Agency NPDES General Permit for the Gulf of Mexico.

Discharges will contain no free oil and will be in compliance with and monitored as required by the permit. Any drilling fluid contaminated with oil will be transported to shore for proper disposal at an authorized disposal site.

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.

Mud may be discharged for purposes of dilution or at end of well. Surveillance of the fluid is accomplished through daily inventory of mud and chemicals added to the system; in addition to monthly and end-of-well LC50 toxicity tests required by EPA. Typical mud components which may be used in the drilling of the proposed well are included as Attachment F.

The anticipated discharges associated with Zilkha's operations in South Marsh Island Block 266 are included as Attachment G.

HYDROGEN SULFIDE

In accordance with Title 30 CFR 250.67, Zilkha Energy Company requests that South Marsh Island Block 266 be classified by the Minerals Management Service as an area where the absence of hydrogen sulfide has been confirmed.

The basis for this determination is through the evaulation of production histories from Forest Oil Corporation's South Marsh Island Block 267 and Brooklyn Union Exploration's production in South Marsh Island Block 253.

PROJECTED EMISSIONS

Projected Air Quality Emissions are included as Attachment H.

ENVIRONMENTAL REPORT

An Environmental Report is included as Attachment I.

COASTAL ZONE CONSISTENCY CERTIFICATION

A certificate of Coastal Zone Management Consistency for the State of Louisiana is enclosed as Attachment J. A copy of the Public Notice request for publication in the Louisiana Baton Rouge State Times is included as Attachment K, as well as the appropriate Parish Journal being included as Attachment L.

ONSHORE SUPPORT BASE

The proposed surface location in South Marsh Island Block 266 is located approximately 22 miles south of the nearest Louisiana coastline and 37 miles to the proposed support base located in Freshwater City, Louisiana. Water depth at the proposed drillsite is approximately 20 feet. A vicinity map showing the location of Block 266 relative to the shoreline and onshore base is included as Attachment M.

Zilkha will utilize existing onshore facilities located in Freshwater City, Louisiana. This will serve as 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. Support vessels and travel frequency during drilling activities are as follows:

	Drilling Activities
Crew Boat	7 Trips Per Week
Supply Boat	3 Trips Per Week
Helicopter	2 Trips Per Week

AUTHORIZED REPRESENTATIVE

Inquiries may be made to the following authorized representative:

Connie J. Goers
J. Connor Consulting, Inc.
P. O. Box 218753
Houston, Texas 77218
(713) 558-0607

LIST OF ATTACHMENTS

A	Typical Diverter and Blowout Preventer Schematics
B	Well Location Table and Plat
C	Structure Map
D	Bathymetry Map
E	Shallow Hazards Analysis
F	Typical Mud Components
G	Quantities and Rates of Discharges
H	Projected Air Emissions
I	Environmental Report
J	Coastal Zone Consistency Certification
K	Public Notice Request - State Times
L	Public Notice Request - Parish Journal
M	Vicinity Map

20" HYDRIL DIVERTER 2000 psi

ITEM	DESCRIPTION
1	20" HYDRIL 2000 psi Type MSP
2	20" FLANGE SPOOL 2000 psi w/6" 2000 psi Outlets
3	6" GATE VALVE std Low Pressure (REMOTE)
4	6" DIVERTER LINE (To Overboard)

BLOWOUT PREVENTER STACK

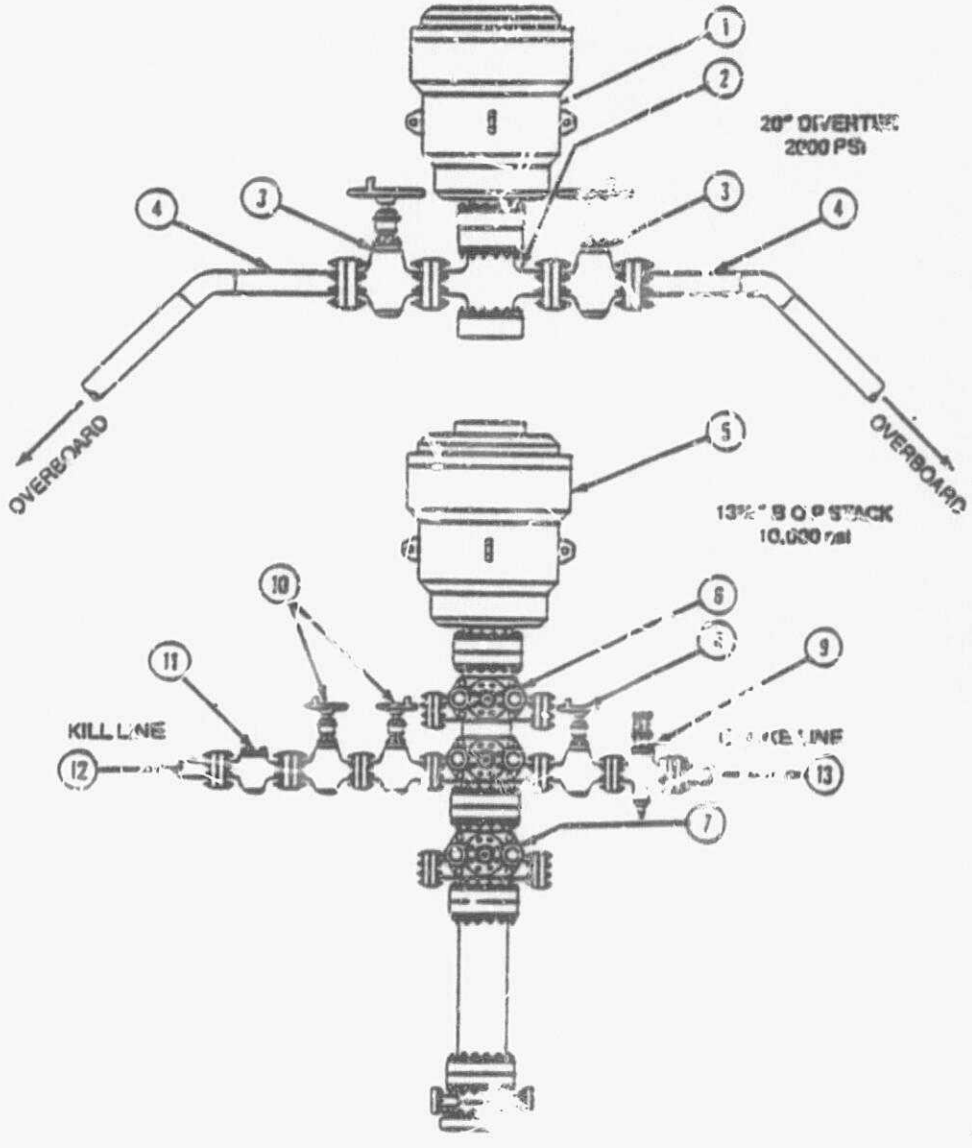
13⅝" 10,000 psi

ITEM	DESCRIPTION
5	13⅝" HYDRIL ANNULAR BOP 5000 psi Type GK H2S Trimmed
6	13⅝" CAMERON DOUBLE BOP 10,000 psi WP H,2S Trimmed
7	13⅝" CAMERON SINGLE BOP 10,000 psi WP H,2S Trimmed
8	4⅟₁₆" MANUAL GATE VALVE Cameron Type "F" H,2S
9	2⅟₁₆" REMOTE HYDRAULIC VALVE Cameron Type "F" 10,000 psi H,2S
10	2⅟₁₆" MANUAL GATE VALVE Cameron Type "F" 10,000 psi H,2S
11	2⅟₁₆" CHECK VALVE Cameron Type "R" 10,000 psi H,2S
12	3" 10,000 psi KILL LINE from Choke Manifold
13	3" 10,000 psi CHOKE LINE from Choke Manifold

8" LINE

ATTACHMENT A-1

BLOWOUT PREVENTER STACK
WITH A
HYDRIL DIVERTER



Refer to following page for description of individual items of this assembly.

[illegible]ILKHA ENERGY COMPANY

INITIAL PLAN OF EXPLORATION

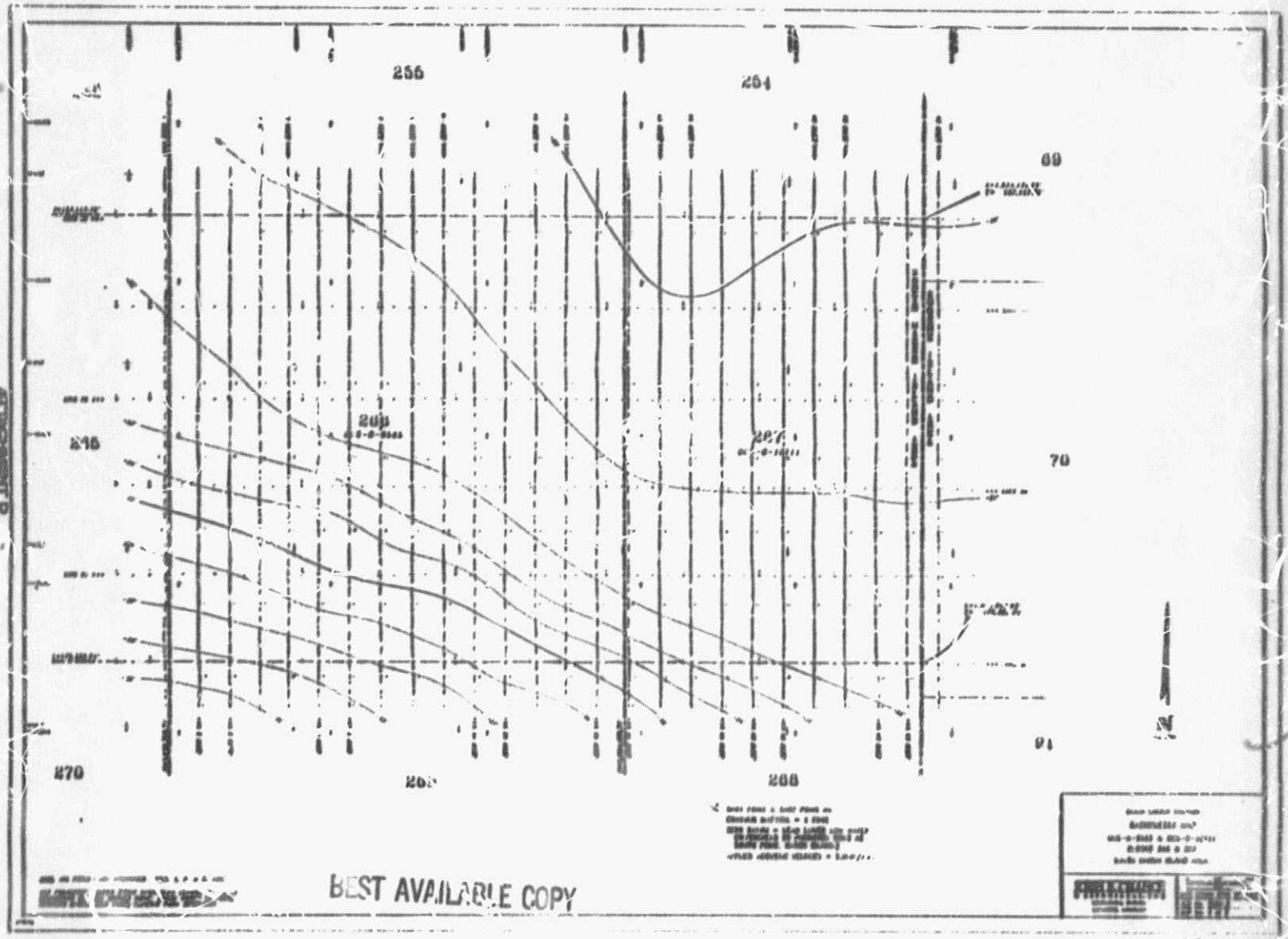
LEASE OCS-G 9565

SOUTH MARSH ISLAND BLOCK 266

WELL LOCATION TABLE

WELL	LOCATION	TOTAL DEPTH	WATER DEPTH	PROPOSED DAYS
A	PSL: 5550' FNL & 7550' FEL		73'	25

ATTACHMENT B-2



JOHN E. CHANCE
& ASSOCIATES, INC.

May 7, 1992

Zilkha Energy Company
1201 Louisiana Street, Suite 3200
Houston, Texas 77002-5623

Attention Mr. David Cameron:

RE: *Proposed "A" Location*
Block 266 (OCS-G-9565)
South Marsh Island Area

Gentlemen:

Zilkha Energy Company contracted John E. Chance & Associates, Inc. to provide a Proposed Wellsite Clearance letter associated with the proposed "A" Location within Block 266, South Marsh Island Area. John E. Chance and Associates, Inc. performed a high resolution Archeological & Hazard Survey across Blocks 266 and 267, South Marsh Island Area, on April 4 - 5, and 7, 1992. The survey was performed aboard the *M/V L'Arpenteur*. Horizontal positioning of the survey vessel was accomplished with the John Chance STARFIX® Satellite Navigation System. Geophysical instruments used during the survey include a GI Airgun Profiler and Teledyne 48-channel streamer with the Texas Instruments DFS-V recording system, Echotrac Bathymetric System, O.R.E. 7.5 kHz Pinger Profiler, GeoMetrics Proton Magnetometer Model 801/3, and E.G.&G. SMS-260 Side Scan Sonar. The survey grid consisted of 26 north-south primary tracklines spaced 300 meters apart (lines 1 - 26) and 6 east-west tielines spaced 900 meters apart (lines 27 - 32). Shot points (navigational fix marks) were recorded at 150 meter intervals along all tracklines. The survey grid was designed to provide complete lateral seafloor coverage with the sonar system and a representative sampling with the magnetometer and seismic systems.

The geophysical survey within Blocks 266 and 267, South Marsh Island Area, was conducted in compliance with the Minerals Management Service NTL-83-3 which is currently in effect for the Gulf of Mexico OCS Region. NTL-83-3 stipulates that a shallow hazard survey be conducted prior to drilling operations. Cable lengths and depths for the geophysical systems were measured for each towed sensor, and the sensor setbacks behind the positioning antenna

were compensated for when mapping the data with reference to post-plotted shot points. The purpose of this letter is to address specific seafloor and subbottom conditions at the Proposed "A" Surface Location.

The Proposed "A" Surface and Bottom Hole Locations are situated within Block 266, South Marsh Island Area at:

5,550 feet FNL	Y = 181,567.79'	Latitude: 29° 09' 53.228" N
750 feet FEL	X = 1,823,728.76'	Longitude: 91° 13' 08.099" W

The water depth at the Proposed "A" Surface Location is approximately -20 feet. Sonar and pinger data indicate a featureless seafloor that is clear of topographic anomalies in the immediate vicinity of the Proposed Site. Seafloor sediments across Block 266, South Marsh Island Area, are reported to consist of sands (Minerals Management Service, Visual No. 3, 1983). McClelland Engineers, Inc. (1979) reports shear strength values ranging from 200 lbs./sq.ft (soft) at the seafloor to 1,750 lbs./sq.ft. (stiff) approximately 150 feet below the mudline. Studies performed by Bernard (1970) and McClelland (1979) indicate approximately 70 to 75 feet of Holocene/Recent Age sediment currently overlies the study area. Pinger profiles display a sequence of convoluted and gas-saturated sediments beneath the study area. A general gas horizon was observed on pinger profiles at depths of 15 - 40 feet below the seafloor. Pinger penetration and resolution were limited due to signal attenuation within the gas-saturated sediments. Acoustic void zones were noted within the Recent Age (Holocene) strata at depths of 7 to 9 feet below the seafloor. The closest acoustic void zone, with respect to the Proposed "A" Location, is located about 3,800 feet to the east-southeast. Pinger profiles detected a buried river channel within the near-surface stratigraphic column buried 6 - 9 feet below the seafloor. The Proposed "A" Location is located directly above this relict feature with the nearest channel margin situated approximately 480 feet to the southeast. Several near-surface faults were observed in the upper sediment sequence in the southeastern portion of Block 266 and in the southern portion of Block 267, however, these faults do not appear to extend to depth on the airgun profiles. The nearest fault, with respect to the Proposed "A" Location, is located approximately 4,930 feet to the southeast and is downthrown to the south. A seismic amplitude anomaly "brightspot" was observed on the airgun profiles about 1,800 feet east of the Proposed Location. This "brightspot" is situated approximately 711 feet below the seafloor and an

JOHN E. CHANCE
& ASSOCIATES, INC.

increase in resistive drilling pressure could occur if this particular elevation is penetrated during future drilling operations.

The closest unidentified magnetic anomaly, with respect to the Proposed Location, is located about 1,800 feet to the northwest. This anomaly registered 12 gammas with a duration of 50 feet. There were no unusual sonar contacts detected in the area. The nearest known man-made fearure, with respect to the Proposed "A" Surface Location, is an EXXON 12-inch Pipeline situated about 1,050 feet to the southeast. Based on the acquired geophysical data and the geologic interpretations made by John E. Chance & Associates, Inc., the immediate vicinity surrounding the Proposed "A" Surface Location is clear of debris or obstacles to future drilling and construction activities.

Thank you, and please do not hesitate to call should further information or assistance be deemed necessary concerning this matter.

Sincerely,
JOHN E. CHANCE & ASSOCIATES, INC.

Melissa C. Jeansonne

Melissa C. Jeansonne
Geophysicist

Drilling Fluids Product Directory

Product Name	Description	[illegible column headers]	Normal Concentration Usage	[illegible]	[illegible]
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AMBAR, INC.					
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BAROID DRILLING FLUIDS, INC.					
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STOLLER CHEMICAL COMPANY, INC.					
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	H_2S Scavenger [illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
DEFOAMERS					
AMBAR, INC.					
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
BAROID DRILLING FLUIDS, INC.					
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

ATTACHMENT F-1

BEST AVAILABLE COPY

BEST AVAILABLE COPY

Product Name	Description	Normal Concentration Usage	[illegible]	[illegible]
[illegible] W250	[illegible]	.25-1		
FOAMBLASTER	[illegible]	[illegible]	Y	7
[illegible]	[illegible]	25%	Y	7
COASTAL FLUID TECHNOLOGIES, INC				
COASTAL [illegible]	[illegible]	[illegible]	Y	7
CESCO CHEMICAL, INC				
CESCO DEFOAM	[illegible]	0.1	Y	7
CHEMLINK, INC.				
[illegible]	[illegible]	0.2	[illegible]	
DRILLSAFE SCHMITCHNIK GMBH				
[illegible]	[illegible]			
[illegible]	[illegible]			
EXXON CHEMICAL COMPANY				
[illegible] ANTIFOAM	[illegible]	0.1	Y	7
INTERNATIONAL DRILLING FLUIDS, INC.				
[illegible]	[illegible]	.5-1.0	Y	6,7
IDF DEFOAMER I	[illegible]	.5-1.0	Y	7
ID SCAV 110	[illegible]	0-.5	Y	7
MAYCO WELLCHEM, INC.				
MAYCO-DEFOAM	[illegible]		[illegible]	
M-I DRILLING FLUIDS CO.				
DEFOAM-X	[illegible]	[illegible]	Y	7
MESSINA INC.				
FOAMFREE-A	[illegible]	[illegible]	Y	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	Y	[illegible]
[illegible]	[illegible]	[illegible]	Y	[illegible]
MILPARK DRILLING FLUIDS				
LD-8	[illegible]	[illegible]	Y	7
W.O. DEFOAM	[illegible]	[illegible]	Y	[illegible]
MONTELLO, INC.				
FOAM BEAKE	[illegible]			
OSCA				
OSCA DEFOAMER	[illegible]	[illegible]		[illegible]
OSCA DEFOAMER 2	[illegible]	[illegible]		
OSCA [illegible]	[illegible]	[illegible]		
STOLLER CHEMICAL COMPANY, INC.				
DEFOAMER A	[illegible]		[illegible]	
SUN DRILLING PRODUCTS CORP.				
[illegible] DEFOAM	[illegible]	[illegible]	Y	7

EMULSIFIERS

Product Name	Description	Normal Concentration Usage	[illegible]	[illegible]
AMBAR, INC.				
[illegible]	[illegible]	[illegible]	Y	
[illegible]	[illegible]	[illegible]	Y	
BAROID DRILLING FLUIDS, INC.				
[illegible]	[illegible]	[illegible]	Y	7
[illegible]	[illegible]	[illegible]	Y	7
[illegible]	[illegible]	[illegible]		
[illegible]	[illegible]	[illegible]		
[illegible]	[illegible]	[illegible]		
[illegible]	[illegible]	[illegible]		
CHEMLINK, INC.				
[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	

Product Name	Description	Normal Concentration Usage	[illegible]
DRILLSAFE SCHMITCHNIK GMBH			
[illegible]	[illegible]		
[illegible]	[illegible]		
[illegible]	[illegible]		
[illegible]	[illegible]		
[illegible]	[illegible]		
[illegible]	[illegible]		
[illegible]	[illegible]		
KELCO			
[illegible]	[illegible]	[illegible]	Y
M-I DRILLING FLUIDS CO.			
[illegible]	[illegible]	[illegible]	Y
[illegible]	[illegible]	[illegible]	Y
[illegible]	[illegible]	[illegible]	
MESSINA INC.			
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	Y
[illegible]	[illegible]	[illegible]	Y
MONTELLO, INC.			
[illegible]	[illegible]		
WELCHEM, INC.			
[illegible]	[illegible]	[illegible]	Y

FLOCCULANTS

Product Name	Description	Normal Concentration Usage	[illegible]
AMBAR, INC.			
[illegible]	[illegible]	[illegible]	Y
BAROID DRILLING FLUIDS, INC.			
[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	Y
CHEMLINK, INC.			
[illegible]	[illegible]	[illegible]	Y
DIXIE CHEMICAL			
[illegible]	[illegible]		Y
[illegible]	[illegible]		Y
GRAIN PROCESSING CORP.			
[illegible]	[illegible]	[illegible]	Y
KELCO			
[illegible]	[illegible]	[illegible]	Y
M-I DRILLING FLUIDS CO.			
[illegible]	[illegible]	[illegible]	Y
MESSINA INC.			
[illegible]	[illegible]	[illegible]	Y
[illegible]	[illegible]	[illegible]	Y
[illegible]	[illegible]	[illegible]	Y
MONTELLO, INC.			
[illegible]	[illegible]		
[illegible]	[illegible]		
WELCHEM, INC.			
[illegible]	[illegible]	[illegible]	Y
[illegible]	[illegible]	[illegible]	Y
[illegible]	[illegible]	[illegible]	Y

FLUID LOSS, VISCOSITY CONTROL AGENTS

Product Name	Description	Normal Concentration Usage	[illegible]
AMBAR, INC.			
[illegible]	[illegible]	[illegible]	Y
[illegible]	[illegible]	[illegible]	Y
[illegible]	[illegible]	[illegible]	Y
[illegible]	[illegible]	[illegible]	Y
[illegible]	[illegible]	[illegible]	Y
[illegible]	[illegible]	[illegible]	Y
[illegible]	[illegible]	[illegible]	Y
[illegible]	[illegible]	[illegible]	Y

ATTACHMENT F-2

BEST AVAILABLE COPY

Product Name	Description	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Normal Concentration (lb/bbl)	[illegible]	[illegible]
[illegible]	[illegible]	•	•	•	•	•	.25	Y	A5
[illegible]	modified lignosulfonate [illegible]	•	•	•	•	•	4	Y	A5
[illegible]	modified tannin	•	•	•	•	•	2	Y	A5
[illegible]	[illegible]	•	•	•	•	•	1	Y	A5
[illegible]	[illegible]	•	•	•	•	•	2	Y	A5
[illegible]	[illegible]	•	•	•	•	•	4,6	Y	A5
[illegible]	[illegible]	•	•	•	•	•	[illegible]	Y	A5
AQUALON									
AquaPAC™	Premium quality, reg vis, polyanionic cellulose	•	•	•	•		.25-2		
AquaPAC™ LV	Premium quality, low vis polyanionic cellulose	•	•	•	•		.25-2		
AquaFLO™ [illegible]	High vis polyanionic cellulose (PAC)	•	•	•	•	•	.5-2		
AquaFLO™ LV	Low vis polyanionic cellulose (PAC)	•	•	•	•	•	.5-2		
[illegible]	Purified, low vis CMC	•	•		•	•	.25-2.5		
[illegible]	Purified, high vis CMC	•	•		•	•	.5-2		
[illegible]	Hydroxyethylcellulose [illegible]	•	•	•	•	•	1-5	Y	
[illegible]	Hydroxyethylcellulose polymer (HEC)	•		•	•		.5-2.5		
AVEBE b.a.									
[illegible]	modified starch	•	•	•	•	•	4-11	Y	A5
[illegible]	modified starch	•	•	•	•	•	15-14	Y	A5
[illegible]	modified [illegible]	•	•	•	•	•	4-16	Y	A5
[illegible]	modified [illegible]	•	•	•	•	•	4-11		A5
[illegible]	Carboxymethyl [illegible]	•	•	•	•	•	2-7	Y	A5
[illegible]	Highly modified [illegible]	•	•	•	•	•	4-11	Y	A5
[illegible]	[illegible]	•	•	•	•	•	5-11	Y	A5
[illegible]	[illegible]	•	•	•	•	•	4-11	Y	A5
[illegible]	modified gum	•	•	•	•	•	2-5		A5
BAROID DRILLING FLUIDS, INC.									
[illegible]	modified lignin polymer	•	•	•	•	•	1-10	Y	API, [illegible]
[illegible]	Sodium carboxymethyl cellulose	•	•	•	•	•	.1-1.5	Y	7
[illegible]	[illegible]	•	•	•	•	•	2-8	Y	7
[illegible]	Organophilic lignite					•	2-20		
[illegible]	Pregelatinized starch	•	•	•	•	•	2-8	Y	7
[illegible]	Polyanionic cellulose	•	•	•	•	•	.1-3	Y	7
[illegible]	Synthetic polymer [illegible]					•	1-6		
[illegible]	High temperature fluid loss [illegible]	•	•	•	•	•	1-6	Y	7
COASTAL-PELICAN, INC.									
[illegible]	[illegible]	•	•	•	•	•	3-6	Y	
[illegible]	[illegible]	•	•	•	•		2-3	Y	
[illegible]	[illegible]	•	•	•	•	•	1-3	Y	
[illegible]	[illegible]	•	•	•	•	•	[illegible]		
COURTAULDS FINE CHEMICALS									
[illegible]	CMC Low vis [illegible]		•	•	•		1-3	n/a	
[illegible]	CMC High vis [illegible]		•	•	•		1-3	n/a	
[illegible] CHEMICAL									
[illegible]	Sodium Polyacrylate		•	•	•			Y	
DRILLING SPECIALTIES COMPANY									
[illegible]	Pure grade CMC	•	•		•	•	.1-2.0	Y	7
[illegible] LV	Pure grade CMC	•	•		•	•	.1-2.0	Y	7
[illegible] HV	Pure grade CMC	•	•		•	•	.1-2.0	Y	7
[illegible]	Polyanionic cellulose	•	•	•	•	•	.1-2.0	Y	7
[illegible]	Polyanionic cellulose	•	•	•	•		.1-2.0	Y	7
[illegible] PLUS	[illegible]	•	•	•	•	•	.1-2.0	Y	7
[illegible]	[illegible]	•	•	•	•	•		Y	7
[illegible] LIQUID	Liquid polyanionic cellulose	•	•	•	•	•		Y	7
[illegible]	Synthetic polymer	•	•	•	•	•	.1	Y	7
[illegible]	Synthetic [illegible] polymer	•	•	•	•	•	.1	Y	7
[illegible]	High molecular weight [illegible]	•			•	•	[illegible]	n/a	
[illegible]	Organic mud thinner		•	•	•	•	.1-2.0	Y	7
[illegible] CHROME FREE	Organic mud thinner		•	•	•		.1-2.0	Y	7
[illegible]									
[illegible]	CMC, all grades	•	•	•		•			
[illegible]	CMC, [illegible] grades	•	•	•		•			
[illegible]	Pregelatinized starch, all grades	•	•	•					
[illegible]	[illegible]	•	•	•					
[illegible]	[illegible] starch	•	•	•					
[illegible]	Cellulose polymer	•	•	•					

ATTACHMENT F-3

J. Connor Consulting, Inc.
P.O. Box 218753 Houston, Texas 77218 (713) 558-0607 Fax: (713) 558-8369

May 19, 1992

PROJECTED AIR EMISSION SCHEDULE FOR INITIAL EXPLORATION PROJECT

GENERAL INFORMATION

Location of Block:	South Marsh Island Block 266 OCS-G 9565
Distance Offshore:	22 miles
Name of Rig:	Jack-Up
Operator:	Zilkha Energy Company 1201 Louisiana, Suite 3200 Houston, Texas 77002
Contact Person:	Mr. Steve Brunner
Well Footage to be Drilled:	
Date Drilling Will Begin:	August 1, 1992

MAJOR SOURCE (OFFSHORE)

Power used aboard drilling vessel; approximate footage to be drilled

Emitted Substance	Projected Emissions (lbs/day)*tons/yr.
CO	1.98
SO_2	.63
NOx	9.30
VOC	.75
TSP	.65

* Based on 60 hphr/ft. from Table 4-3, "Atmospheric Emissions from Offshore Oil and Gas Development and Production", EPA No. 450/3-77-026, June 1977

** Emission factors from Table 3.3.3-1, "Compilation of Air Pollutant Emission Factors", Third Edition, EPA Report AP-42, August, 1977

ATTACHMENT H-1

MINOR SOURCES (OFFSHORE)*

Including crew boat (7 trips/week); supply boat (3 trips/week); helicopter (2 trip/week); and loading and unloading operations.

Emitted Substance	Projected Emissions (lbs/day)*tons/yr.
CO	.04
SO_2	.00
NOx	.10
VOC	.00
TSP	.00

* Tables 3.2.1-3, 3.2.3-i and 2.1-1, "Compilation of Air Pollutant Emission Factors, Third Edition, EPA Report AP-42, August, 1977.

TOTAL ALL SOURCES (tons/year)

1991	CO	SO_2	NOx	VOC	TSP
Major	1.98	.63	9.30	.75	.65
Minor	.04	.00	.10	.00	.00
Total	2.02	.63	9.40	.75	.65

ONSHORE SOURCES

These should be about the same as minor sources unless new facilities are installed at the onshore base. No additional facilities are required or planned at this time.

EMISSION EXEMPTION DETERMINATION

For CO: $E = 3400(D)^{2/3} = 3400\ (22)^{2/3} = 26.695$ tons/year
For NOx, VOC, TSP & SO_2: $E = 33.3D = 33.3\ (22) = 733$ tons/year

FINDINGS OF AIR QUALITY REVIEW

As per DOI/MMS regulations, this facility is exempt from further air quality review as it has been determined that its operations will not have a significant adverse impact on air quality.

J. Connor Consulting, Inc.
P.O. Box 218753 Houston, Texas 77218 (713) 558-0607 Fax: (713) 558-8369

ZILKHA ENERGY COMPANY

INITIAL PLAN OF EXPLORATION

ENVIRONMENTAL REPORT

SOUTH MARSH ISLAND BLOCK 266

LEASE OCS-G 9565

OFFSHORE, LOUISIANA

Prepared by:

J. Connor Consulting, Inc.
P.O. Box 218753
Houston, TX 77218
713/558-0607

May 19, 1992

ATTACHMENT 1

TABLE OF CONTENTS

I. DESCRIPTION OF PROPOSED ACTION

Zilkha Energy Company proposes to conduct exploratory activities within South Marsh Island Block 266, Offshore, Louisiana.

As proposed, the Initial Plan of Exploration for South Marsh Island Block 266 provides for the drilling of one (1) exploratory well.

At this time, the planned commencement date for proposed activities is on or about August 1, 1992.

A. DESCRIPTION OF PROPOSED TRAVEL MODES, ROUTES AND FREQUENCY

Support vessels will be dispatched from a support base located in Freshwater City, Louisiana during drilling and completion operations of the proposed well. The boats will normally come to the block via the most direct route from Freshwater City, Louisiana, however, boats operating in the field may travel from other facilities nearby. Following is an estimate of trips to the proposed operation.

	Drilling Operations
Crew Boat	7 Trips Per Week
Supply Boat	3 Trips Per Week
Helicopter	2 Trips Per Week

B. ONSHORE SUPPORT BASE

The proposed activities will utilize a support base located at Freshwater City, Louisiana. This base provides 24-hour service, a radio tower, phone patch, dock space, office space, parking lot, equipment and supply storage space, drinking and drill water, etc. The proposed exploratory activities will help to maintain this base at its present level of activity. No expansion of the physical facilities or the creation of new jobs is expected to result from the work planned in conjunction with this block.

The first socioeconomic data base report will be submitted when the MMS and the states of Alabama, Louisiana, and Mississippi identify the specific parameters to be addressed in these semi-annual reports.

C. NEW OR UNUSUAL TECHNOLOGY

No new or unusual technology will be required for this operation.

D. VICINITY MAP

South Marsh Island Block 266 lies approximately 22 miles south of the Louisiana coastline and approximately 37 miles south of Zilkha's proposed onshore support base located in Freshwater City, Louisiana.

Water depths range from a minimum of 20 feet to a maximum of 28 feet in the block.

II. DESCRIPTION OF AFFECTED ENVIRONMENT

A. COMMERCIAL FISHING

The Gulf of Mexico provides 40% of the commercial fish landings and one-third of the recreational fishing activities in the continental U. S. Commercial landings of all fisheries in the Gulf during 1989 totaled nearly 1.8 billion pounds, valued at $649 million.

Louisiana ranked first among Gulf states in total commercial fishery landings for 1989 with nearly 1.2 billion pounds landed, valued at $264.2 million. Menhaden was the highest quantity finfish, valued at $40.7 million. Shrimp was the highest value shellfish, valued at $134 million. In addition, the following 10 species each accounted for landings valued at over $1 million: black drum, black mullet, spotted seatrout, shark, red snapper, swordfish, bluefin tuna, yellowfin tuna, blue crab, and the American oyster. In 1989, Louisiana had about 24,000 commercial saltwater, licensed fishermen.

Louisiana is the most productive state in the Gulf of Mexico in terms of commercial fisheries because of its extensive estuaries, coastal marshes, and nutrient input from the Mississippi and Atchafalaya Rivers. Coastal Louisiana contains approximately 60% of the estuaries and marshes in the Gulf of Mexico. Over 90% of the blue crab harvest, which amounts to about 50 million pounds, comes from estuary nursery areas.

B. SHIPPING

The establishment of a series of safety fairways or traffic separation schemes (TSS's), and anchorage areas provide unobstructed approach for vessels using U.S. ports. Shipping safety fairways are lanes or corridors in which no fixed structure, whether temporary or permanent, is permitted. TSS's increase navigation safety by separating opposing lanes of vessel traffic. Fairway anchorage are areas contiguous to and associated with a fairway, in which fixed structures may be permitted within certain spacing limitations.

Fairways play an important role in the avoidance of collisions on the OCS, particularly in the case of the larger oceangoing vessels, but not all vessels stay within the fairways. Many others, such as fishing boats and OCS support vessels, travel through areas with high concentration of fixed

structures. In such cases the most important mitigation factor is the requirement for adequate marking and lighting of structures. After a structure has been in place for a while, it often becomes a landmark and an aid to navigation for vessels that operate in the area on a regular basis. Most ocean going vessels are equipped with radar capable of aiding navigation in all weather conditions. This has contributed to safe navigation on the OCS.

South Marsh Island Block 266 is clear of any shipping fairways or anchorage areas.

C. PLEASURE BOATING, SPORT FISHING AND RECREATION

The northern Gulf of Mexico coastal zone is one of the major recreational regions of the United States, particularly in connection with marine fishing and beach activities. The coastal beaches, barrier islands, estuarine bays and sounds, river deltas, and tidal marshes are used extensively and intensively for recreational activity by Gulf Coast residents and tourists from throughout the nation, as well as from foreign countries. Publicly-owned and administered areas such as national seashores, parks, beaches, and wildlife lands, as well as specially designated preservation areas such as historic and natural sites and landmarks, wilderness areas, wildlife sanctuaries, and scenic rivers attract residents and visitors throughout the year. Commercial and private recreational facilities and establishments, such as resorts, marinas, amusement parks, and ornamental gardens, also serve as primary-interest areas.

The two major recreational areas most directly associated with the offshore leasing and potentially affected by it are the offshore marine environment and the coastal shorefront of the adjoining states. The major recreational activity occurring on the OCS is offshore marine recreational fishing and diving. Studies, reports, and conference proceedings published by MMS and others have documented a substantial recreational fishery including scuba diving, directly associated with oil and gas production platforms. The recreational fishing associated with oil and gas structures stems from their function as high profile artificial fishing reefs. A report on the 1984 Marine Recreational Fishery Statistics Surveys presented by NMFS at the Sixth Annual Gulf of Mexico Information Transfer Meeting indicates a majority of the offshore recreational fishing in the Central and Western Gulf of Mexico is directly associated with the oil and gas structures. Many other studies have demonstrated that when oil and gas structures are accessible to marine recreational fishermen and scuba divers they are a major attraction for marine recreational activities and a positive influence on tourism and coastal economics. Throughout the Gulf of Mexico Region, there is high interest in acquiring, relocating, and retaining selected oil and gas structures for artificial reefs to enhance marine fisheries when the structures are no longer useful for oil and gas production.

With the exception of Grand Isle and vicinity and a stretch of beach area in Cameron Parish, (Peveto/Constance/Ocean View Beaches, Holly Beach, Hackberry Beach) Louisiana has very limited beach area suitable for recreation. Most

of it is very narrow, of poor recreational quality and generally inaccessible by automobile. Some of the highest quality beach areas in coastal Louisiana are found along the barrier islands chain off Terrebonne Parish. Several additional significant recreational resources are found along the Gulf Coast. Louisiana has ornamental gardens, scenic roads, rivers, and trails.

D. POTENTIAL OR KNOWN CULTURAL RESOURCES

Archeological resources are any historic or pre-historic site, structure, object or feature that is man-made or modified by human activity. Significant archeological resources are defined in 36 CFR 800, Section 60.6 and generally include properties greater than 50 years old which are associated with events that have made a significant contribution to the broad patterns of our history; are associated with the lives of persons significant in the past; embody the distinctive characteristics of a type, period, or method of construction; represent the work of a master; possess high artistic values; represent a significant and distinguishable entity whose components may lack individual distinction; or have yielded, or may be likely to yield, information important in prehistory or history.

Geographic features that have a high probability for associated prehistoric sites in the Central Gulf include barrier islands and back-barrier embayments, river channels and associated floodplains and terraces, and salt-dome features.

The high resolution geophysical survey data from South Marsh Island Block 266 has been evaluated for evidence of historic shipwrecks and high probability areas for prehistoric archaeological sites associated with formerly subaerially exposed landforms. The block is in an area of high probability for the occurrence of prehistoric archaeological resources.

The evaluation of the high resolution geophysical survey data from Block 266 indicates that although the Pleistocene topsoils in this area could have been occupied by prehistoric man during the extensive period of subaerial exposure, possible archaeological remains along this horizon have been buried beyond a reasonable recovery depth. A buried channel feature was observed within the upper 6 to 9 feet of strata which could represent a distributary stream of the Maringouin Delta. Based on archaeological evidence from existing sites within coastal Louisiana, the natural levees of distributary channels were the favored landforms inhabited by prehistoric Indian bands. These levees offered high ground and continual access to fresh water in addition to an abdundanta supply of fish, shellfood, and a wide variety of edible plants and animals. This particular Study Area may have been inhabited for several hundreds of years by Archaic tribes after the subaerial development of the delta plain, and the margins of the distributary stream channel represent the most likely zone for possible preservation of prehistoric archaeological material. The pinger profiles do not show any evidence of well developed natural levees, but the margins of the former stream may have been inhabited and alluvium may have been buried cultural material prior to marine transgression thereby preserving possible sites from destruction by shoreline wave erosion. The channel banks will be noted

during future lease planning as zones of potential preservation for prehistoric archaeological material.

E. ECOLOGICALLY SENSITIVE FEATURES

Barrier beaches are a common landform along the Gulf Coast and stretch in an irregular chain from Florida to Texas. These elongated, narrow landforms are composed of sand and other loose sediments transported by waves, currents, storm surges, and wind. Barrier landforms are a young coastal feature. The term "barrier" identifies the structure as one that protects other features, such as bays, estuaries, and marshes, from direct impacts of the open ocean. By separating coastal waters from the ocean, barriers contribute to the amount of estuarine habitat along the coast. As much as two-thirds of the top value Atlantic and Gulf Coast species of fish are considered to be directly dependent during some stage of their life on conditions in these estuaries.

Another benefit of both the islands and their adjacent marshes and bays is that of providing habitats for a large number of birds and other animals, including several threatened or endangered species, for example, the loggerhead turtle, the southern bald eagle, alligators, and brown pelicans.

The islands generally are regressive with high beach ridges and prominent sand dunes. Although overwash channels do not commonly occur, the islands may be overwashed during strong storms. The islands in general are stable, with no trend toward erosion or thinning of the island, but with a trend toward westward migration in response to the predominantly westward-moving longshore currents.

Louisiana has the nation's most rapidly retreating beaches. The average retreat for the Fourchon beach over the last 100 years has been in excess of 60 ft/yr. The statewide average according to Dolan et al. (1982) is in excess of 11 ft/yr. Beaches along the deltaic plain in Louisiana fit into one of three categories, depending on the stage of the deltaic cycle of the nearby landmass. When a major distributary of the Mississippi River is abandoned, subsidence results in a local sea level transgression that transforms the active delta into an erosional headland with flanking barriers. Fourchon Beach is an example of an eroding headland beach. With increased age and subsidence, the barrier shoreline evolves into a transgressive barrier island arc that is separated from the mainland by a lagoon Isles Derniers is an example of this phenomenon. Eventually with continued subsidence and sediment deprivation, the island ceases to exist.

The importance of coastal wetlands to the coastal environment has been well documented. Coastal wetlands are characterized by high organic productivity, high detritus production, and efficient nutrient recycling. They provide habitat for a great number and wide diversity of invertebrates, fish, reptiles, birds, and mammals. Wetlands are particularly important as nursery grounds for juvenile forms of many important fish species. The Louisiana coastal wetlands support over two-thirds of the Mississippi Flyway wintering waterfowl population and the largest fur harvest in North America.

Louisiana contains most of the Gulf coastal wetlands. The deterioration of coastal wetlands, particularly in Louisiana, is an issue of concern. In Louisiana, the annual rate of wetlands loss has been measured at 130 km^2 for the period 1955-1978. Several factors contribute to wetlands loss in Coastal Louisiana, including sediment deprivation (a result of a 50% decrease in the suspended sediment load of the river since the 1950's and the channelization of the river, which has prevented overbank sediment deposition), subsidence and sea-level rise, and the construction of pipeline and navigation canals through the wetlands.

A recent study funded by MMS entitled "Causes of Wetland Loss in the Coastal Central Gulf of Mexico", examined coastal ecosystems of the Northern Gulf of Mexico region and how wetland habitats have changed as a result of natural processes and man's activities thereon. The study's primary focus was on assessing and quantifying the direct and indirect impacts of OCS-related activities on wetland areas. Canal construction for pipelines and navigation has been the major OCS-related impacting factor.

The shelf and shelf edge of the Central and Western Gulf are characterized by topographic features which are inhabited by benthic communities. The habitat created by the topographic features is important because they support hard-bottom communities of high biomass, high diversity, and high numbers of plant and animal species; they support, either as shelter, food, or both, large numbers of commercially and recreationally important fishes; they are unique to the extent that they are small isolated areas of communities in the vast Gulf of Mexico; they provide a relatively pristine area suitable for scientific research; and they have an aesthetically attractive intrinsic value.

Live bottoms are regions of high productivity characterized by a firm substrate with high diversity or density of epibota. These communities are scattered across the west Florida shelf in the shallow waters with depth zonation apparent in dominant communities, and within restricted regions of the Central Gulf of Mexico. Live bottoms also include biological assemblages consisting of sea fans, sea whips, hydroids, ascidians, or corals living upon and attached to naturally occurring hard or rocky formations with rough, broken or smooth topography; or areas whose lithotome favors the accumulation of turtles, fishes, seagrass, algae, and other fauna.

Chemosynthetic clams, mussels, and tube worms, similar to the hydrothermal vent communities of the eastern Pacific have been discovered in the deep waters of the Gulf. These cold-water communities are associated with seismic wipe-out zones and hydrocarbon seep areas between water depths greater than 400 meters.

Seven distinct biotic zones have been identified on the banks of the Gulf. None of the banks contain all of the seven zones. The Central Gulf of Mexico lists 16 topographic features. None of those listed are in or near the vicinity of the proposed operations in South Marsh Island Block 266.

F. PIPELINES AND CABLES

As a prudent operator, Zilkha Energy Company will conduct all operations in accordance with the provisions specified in Minerals Management Service Notice to Lessees 83-03 in the vicinity of existing pipelines and/or cables.

G. OTHER MINERAL USES

The activities proposed for South Marsh Island Block 266 will have no direct or indirect impact on other mineral uses.

H. OCEAN DUMPING

All ocean dumping is regulated by the Marine Protection, Research, and Sanctuaries Act of 1972. A USEPA permit is required for all ocean dumping of industrial wastes and municipal sludge materials. Ocean dumping of sewage and industrial wastes is no longer permitted. The USEPA has one designated deep-water disposal site in the Gulf of Mexico.

The major discharges from offshore oil and gas exploration and production activities include produced water, drilling fluids and cuttings, ballast water, and storage displacement water. 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, produced sand, deck drainage, and miscellaneous well fluids (cement, BOP fluid); and other sanitary and domestic wastes, gas and oil processing wastes, and miscellaneous discharges. These wastes are generally regulated by the EPA under three federal programs, Resource Conservation and Recovery Act (RCRA), National Pollutant Discharge Elimination System Program (NPDES) and the Underground Injection Control Program.

I. ENDANGERED AND THREATENED SPECIES AND CRITICAL HABITAT

Although a large number of endangered and threatened species inhabit the Gulf Coast States and their adjoining waters, only a small percentage occupy coastal and marine habitats. An even smaller number are likely to be affected by OCS oil and gas exploration and production.

The Fish and Wildlife Service and the National Marine Fisheries Service have noted fourteen protected species, among them the seven whale species and one candidate species, the Gulf sturgeon have been selected for description and analysis because of the potential frequency or severity of their interactions with proposed OCS oil and gas exploration and development activities.

Five of the protected species -- the Alabama beach mouse, Perdido Key mouse, Mississippi sandhill crane, jaguarundi, and ocelot--could be impacted only by onshore development because of their primary habitat is not on the OCS.

The Kemp's ridley sea turtle is the most imperiled of the world's marine turtles. Female Kemp's ridley sea turtles appear to inhabit nearshore areas and congregations of female Kemp's have been recorded off the mouth of the Mississippi River.

The loggerhead sea turtle occurs worldwide in depths ranging from estuaries to the continental shelf. The largest nesting concentration in the United States is on the southeast Florida coast. In the Gulf of Mexico, the Florida Panhandle accounts for approximately one-third of the nesting on the Florida Gulf Coast. Nesting has also been reported on Gulf Shores and Dauphin Island, Alabama; Ship Island, Mississippi; and the Chandeleur Islands, Louisiana.

Six Federally listed endangered whale species have been reported in the Gulf of Mexico--the blue, fin, humpback, right, sie, and sperm whales. Generally, these large cetaceans inhabit the continental slope and deep oceanic waters; occasionally, they are sighted nearshore. Right whales are the most endangered cestacean in the Western Hemisphere.

The piping plover is endangered in the Great Lakes watershed and threatened elsewhere. Its historic populations have remained depressed because of losses to their beach and nesting habitat. The largest numbers and highest wintering densities of birds were found in the Western and Central Gulf of Mexico. Piping Plovers a susceptible to contact with spilled oil because of their preference for feeding in intertidal areas.

Brown pelicans remain listed as endangered in Mississippi, Louisiana and Texas. Nesting occurs in colonies on coastal islands. Three brown pelican rookeries occur in Louisiana and a small active rookery is in Texas. Brown pelicans inhabit the coast, rarely venturing into freshwater or flying more than 32 km offshore.

The Eskimo curlew is one of the rarest native North American birds in the wild. Only 18 birds were reported between 1983-1987. Most of these sightings occur in coastal Texas. The birds migrate through and concentrate in the Gulf Coast marshes during the spring on their way from South America to Canada. The drastic population decline, which was first reported in the late 1800's, appears due to over harvest, habitat loss, and short-term climatic changes.

The whooping crane breeding population winters along the Texas coast from November to April. The birds occupy the coastal marshes along Texas gulf coast counties. Portions of these counties and the Aransas National Wildlife Refuge have been designated as critical habitat for the whooping crane.

A marine mammal, the West Indian manatee, is a aquatic herbivore and one of the five living species of the order Sirenia. It inhabits low-energy coastal areas throughout the northern Gulf of Mexico; however, it is known to winter only in south and central Florida.

The Gulf sturgeon--a subspecies of the Atlantic sturgeon was proposed for listing as a federally protected species for protection under the Endangered

Species Act on May 2, 1990, therefore the impacts of the proposed actions will be analyzed as if it were a designated endangered species. Its present spawning is limited to rivers from the Pearl to the Suwannee Rivers. The largest spawning population occurs in the Suwannee River. The decline of the Gulf sturgeon is due to overfishing and habitat destruction , primarily the damming of coastal rivers and degradation of water quality.

J. SOCIOECONOMIC

In relation to oil and gas industry in the Gulf of Mexico, the exploration and production of crude oil and gas is classified as a primary industry. Classified as secondary industries are activities associated with the processing of crude oil and gas in refineries, natural gas plants, and petrochemical plants.

The offshore oil exploration industry including oil companies, drilling contractors, and oilfield suppliers provide a major input to Louisiana's economy. A number of ports in the Central and Western Gulf have developed into important centers for offshore support. The most active of these in Louisiana are (from east to west) Venice, Morgan City, Intracoastal City, and Cameron, Louisiana. The onshore support base for operations in South Marsh Island Block 266 is Fresh[illegible]ity, Louisiana.

III. UNAVOIDABLE ADVERSE ENVIRONMENTAL IMPACTS

A. WATER QUALITY

Routine operational discharges (drilling muds and cuttings, produced waters, deck drainage and sanitary and domestic wastes) or accidental oil spills may temporarily degrade some measures of water quality adjacent to the proposed surface location. However, these impacts decrease to very low with distance from the source. Therefore, the impact level from these factors is considered to be low.

B. EFFECTS ON MARINE ORGANISMS

Some organisms will be killed and some will be temporarily functionally impaired as a result of operational discharges. The most affected groups will be plankton and benthos immediately around the proposed surface locations. Damage will be both mechanical and toxicological. These communities are widespread throughout the deep-water areas of the Gulf.

These impacts are considered to be localized, short term and reversible at the population level.

An oil spill could affect a broad spectrum of marine organisms. However, most effects would be localized and short term. Any effects on mammals and turtles would be significant.

C. EFFECTS ON THREATENED OR ENDANGERED SPECIES

Activities resulting from the proposed action have a potential to cause detrimental effects on endangered cetaceans. These cetaceans could be impacted by operational discharges, helicopter and vessel traffic, platform noise, explosive platform removals, seismic surveys, oil spills, and oil-spill response activities. The effects of the majority of these activities are estimated to be sublethal, and expected impact levels range from low to very low. Lethal effects are estimated only from large oil spills. The expected impact levels from different sizes of oil spills range from low to high. It is expected that the Central Gulf endangered and threatened cetaceans will experience a moderate level of impact resulting in sublethal effects that are chronic and could result in persistent physiological or behavior changes.

D. WETLANDS AND BEACH

There is a low probability that a large oil spill of greater than 50 bbls will contact a barrier island. In the event of oil-spill contact occurring, erosional changes in the barrier could result during cleanup operations. Small spills, less than 50 bbls, will affect only a short stretch of beach and will be cleaned within a week with no effects on beach morphology.

No large spills from offshore or inshore sources are expected to occur and contact coastal wetlands. Although several smaller spills are expected to contact wetlands from inshore barge and pipeline accidents in coastal Louisiana, only small areas of wetlands will be contacted by high-enough concentrations of oil to result in the conversion of wetlands to open water habitat. Seagrass beds will be contacted by such low concentrations of oil from the spills that no impacts are expected.

Louisiana contains most of the Gulf coastal wetlands which occur in the Mississippi River Deltaic Plain and the Chenier Plain. Several factors contribute to wetlands loss in Louisiana, including sediment deprivation, subsidence and sea-level rise, and the construction of pipeline and navigation channels through the wetlands. In Mississippi, marshes occur primarily as discontinuous wetlands associated with estuarine environments, such as in the Pearl and Pascagoula River deltas and Mobile Bay. The wetlands in this area of the Gulf are more stable than those in Louisiana, reflecting the more stable substrate and more active sedimentation per unit of wetland area.

Major causes of saltmarsh wetland losses were industrial development-navigation, residential-commerical development, natural succession, and erosion-subsidence.

E. AIR QUALITY

The potential degrading effects on air quality from onshore and offshore operational activities are platform emissions; drilling activities during exploration, delineation, and development; service vessel operation; evaporation of volatile hydrocarbons for surface oil slicks; and fugitive emissions during hydrocarbon venting and offloading. Emissions of pollutants into the atmosphere for these activities are likely to have a low impact on offshore air quality because of prevailing atmospheric conditions, emission heights, and pollutant concentrations. Onshore impact on air quality from emission from OCS activities is estimated to be low because of the atmospheric regime, the emission rates, and distance of these emissions from the coastline.

F. COMMERCIAL FISHING

The major impact producing factors on fishing activities from the proposed operations is structure placement, oil spills, production platform removals, seismic surveys, subsurface blowouts, OCS discharges of drilling muds and produced waters, and underwater OCS obstructions.

Oil spills that contact the coastal bays, estuaries, and open Gulf areas with high concentrations of floating eggs and larvae have the greatest potential for damage to commercial fisheries. The majority of the Gulf's fishes are estuarine dependent. An oil spill could seriously affect commercial fisheries such as menhaden, shrimp, and blue crab that use these areas as nursery or spawning grounds.

The emplacement of one structure eliminates approximately 3 acres of commercial trawling space. Underwater OCS obstructions cause gear conflicts which result in such losses as trawls, shrimp catch, business downtime, and vessel damage.

Commercial fishery resources may also be affected by the discharge of drilling muds which may contain material toxic to marine fishes; however, this is only at concentrations four or five orders of magnitude higher than those found more than a few meters from the discharge point. Further dilution is extremely rapid in offshore waters.

In conclusion, although these factors impact the commercial fisheries industries, the level of impact is expected to be very low.

G. SHIP NAVIGATION

Very little interference can be expected between the drilling unit, structures and marine vessels utilized during exploratory operations and ships that use established fairways. However, at night and during rough weather, fog, and heavy seas, ships not using established fairways could collide with the structures.

Approved aids to navigation will be installed on the drilling rig and all marine vessels servicing these operations in accordance with USCG regulations.

H. CULTURAL RESOURCES

The greatest impact to a historic and/or prehistoric cultural resource as a result of the proposed action would result from a contact between an OCS offshore activity (drilling rig emplacement) and a historic shipwreck and/or prehistoric site located on the OCS.

The cultural resource surveys required prior to an operator beginning oil and gas activities in a lease block are estimated to be 90 percent effective as identifying possible sites.

While the data collection and evaluation for the study conforms to the requirements of the Minerals Management Service, it is possible that some cultural resources considered potentially significant and may still remain undiscovered within the South Marsh Island Block 266 survey area tract.

Should additional analysis of the near-surface sedimentary section in South Marsh Island Block 266 reveal the presence of any previously cultural archaeological remains, this information will be reported to the Minerals Management Service Regional Supervisor.

I. RECREATION AND AESTHETIC VALUES

The drilling rig and marine vessels may represent an obstacle to some sport fisherman, but such an effect is expected to be negligible and not permanent.

Even though existing regulations and orders prohibit indiscriminate littering of the marine environment with trash, offshore oil and gas operations involving men, machines, equipment, and supplies is bound to result in some littering of the ocean. Human nature and accidents associated with offshore operations will contribute some floatable debris to the ocean environment which will eventually come ashore on major recreational beaches.

The effects that normal operations or a minor oil spill would have on any fish stocks important to sport fishermen are also considered to be negligible.

A minor oil spill and/or non-petroleum floating debris could foul beaches inshore of the lease area. The fouling of the beaches would be an aesthetic detriment that could adversely affect recreation. Any effects on beach recreation could adversely affect tourism, and consequently, the local economy.

IV. SUMMARY

The proposed activity will be carried out and completed with the guarantee of the following items.

A. The best available and safest technologies will be utilized throughout the project. This includes meeting all applicable requirements for equipment types, general project layout, safety systems, and equipment and monitoring systems.

B. All operations are covered by a Minerals Management Service approved Oil Spill Contingency Plan.

C. All applicable Federal, State, and Local requirements regarding air emission and water quality and discharge for the proposed activities, as well as any other permit conditions, will be complied with.

D. The proposed activities described in detail in the Initial Plan of Exploration will comply with Louisiana's Coastal Management Program and will be conducted in a manner consistent with such Program.

REFERENCES

1. Final Environmental Impact Statement, Proposed Oil and Gas Lease Sales 110 and 112, Gulf of Mexico OCS Region, OCS EIS, MMS 86-0087.

2. Final Environmental Impact Statement, Proposed Oil and Gas Lease Sales 110 and 112, Gulf of Mexico OCS Region, OCS EIS, MMS 86-0087, visuals.

3. Final Environmental Impact Statement, Proposed Oil and Gas Lease Sales 113, 115, and 116, Gulf of Mexico OCS Region, OCS EIS, MMS 87-0077.

4. Final Environmental Impact Statement, Proposed Oil and Gas Lease Sales 118 and 122, Gulf of Mexico OCS Region, OCS EIS, MMS 88-0044.

5. Final Environmental Impact Statement, Proposed Oil and Gas Lease Sales 123 and 125, Gulf of Mexico OCS Region, OCS EIS, MMS 89-0053.

6. Final Environmental Impact Statement, Proposed Oil and Gas Lease Sales 131, 135 and 137, Gulf of Mexico OCS Region, OCS EIS, MMS 90-0042.

7. Final Environmental Impact Statement, Proposed Oil and Gas Lease Sales 139 and 141, Gulf of Mexico OCS Region, OCS EIS, MMS-91-0054.

COASTAL ZONE MANAGEMENT

CONSISTENCY CERTIFICATION

INITIAL PLAN OF EXPLORATION

South Marsh Island Block 266

Lease OCS-G 9565

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.

Arrangements have been made with the Morning Advocate - State Times in Baton Rouge, Louisiana to publish a legal notice no later than May 30, 1992.

Additionally, arrangements have been made with [illegible] Herald in Vermilion Parish to publish a public notice of the proposed activities no later than May 30, 1992.

[illegible]
Lessee or Operator

Certifying Official

May 19, 1992
Date

ATTACHMENT J

ZILKHA ENERGY COMPANY

May 19, 1992

Morning Advocate State Times
Legal Ad Department- Public Notice
625 Lafayette Street
Baton Rouge, Louisiana 70804

Attention: Vicky Thompson

Gentlemen:

Please publish the following as a legal ad no later than May 30, 1992.

Public Notice of Federal Consistancy review of a Proposed Initial Plan of Exploration by the Coastal Management Section/Louisiana Department of Natural Resources for the plan's consistancy with the Louisiana Coastal Resources Program.

Applicant: Zilkha Energy Company
1201 Louisiana Street, Suite 3200
Houston, Texas 77002

Location: South Marsh Island Block 266
Lease OCS-G 9565
Offshore, Louisiana

Description: Exploratory activities will include the drilling of one (1) well. Support operations will be from an existing onshore base located in Freshwater City, Louisiana. No ecologically sensitive species or habitats are expected to be affected by these activities.

A copy of the plan described above is available for inspection at the Coastal Management Division Office located on the 10th floor of the State Lands and Natural Resources Building, 625 North 4th Street, Baton Rouge, Louisiana. Office hours: 8:00 AM to 5:00 PM, Monday thru Friday. The public is requested to submit comments to the Louisiana Department of Natural Resources Coastal Management Division, Attention: OCS Plans, P. O. Box 44487, Baton Rouge, Louisiana 70804-4487. Comments must be received within 15 days of this notice or 15 days after the Coastal Management Section obtains a copy of the plan and

ATTACHMENT K-1

1201 LOUISIANA STREET, SUITE 3200 • HOUSTON, TEXAS 77002-5223
TELEPHONE (713) 655-5900 • TELECOPIER (713) 655-5961
TELEX 796-679

it is available for public inspection. This public notice is provided to meet the requirements of the NOAA Regulations on Federal Consistancy with approved Coastal Management Programs.

A copy of the published notice and bill should be submitted to the attention of the undersigned:

Mr. Steve Brunner
1201 Louisiana Street, Suite 3200
Houston, Texas 77002

Please direct any questions concerning this request to the attention of the undersigned.

Sincerely,

ZILKHA ENERGY COMPANY

Steve Brunner
Operations Manager

SB:CJG

ZILKHA ENERGY COMPANY

May 19, 1992

Kaplan Herald
219 Cushing Street
Kaplan, Louisiana 70548

Attention: Conrad Kaplan

Gentlemen:

Please publish the following as a legal ad no later than May 30, 1992.

Public Notice of Federal Consistency review of a Proposed Initial Plan of Exploration by the Coastal Management Section/Louisiana Department of Natural Resources for the plan's consistency with the Louisiana Coastal Resources Program.

Applicant: Zilkha Energy Company
1201 Louisiana Street, Suite 3200
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Houston, Texas 77002

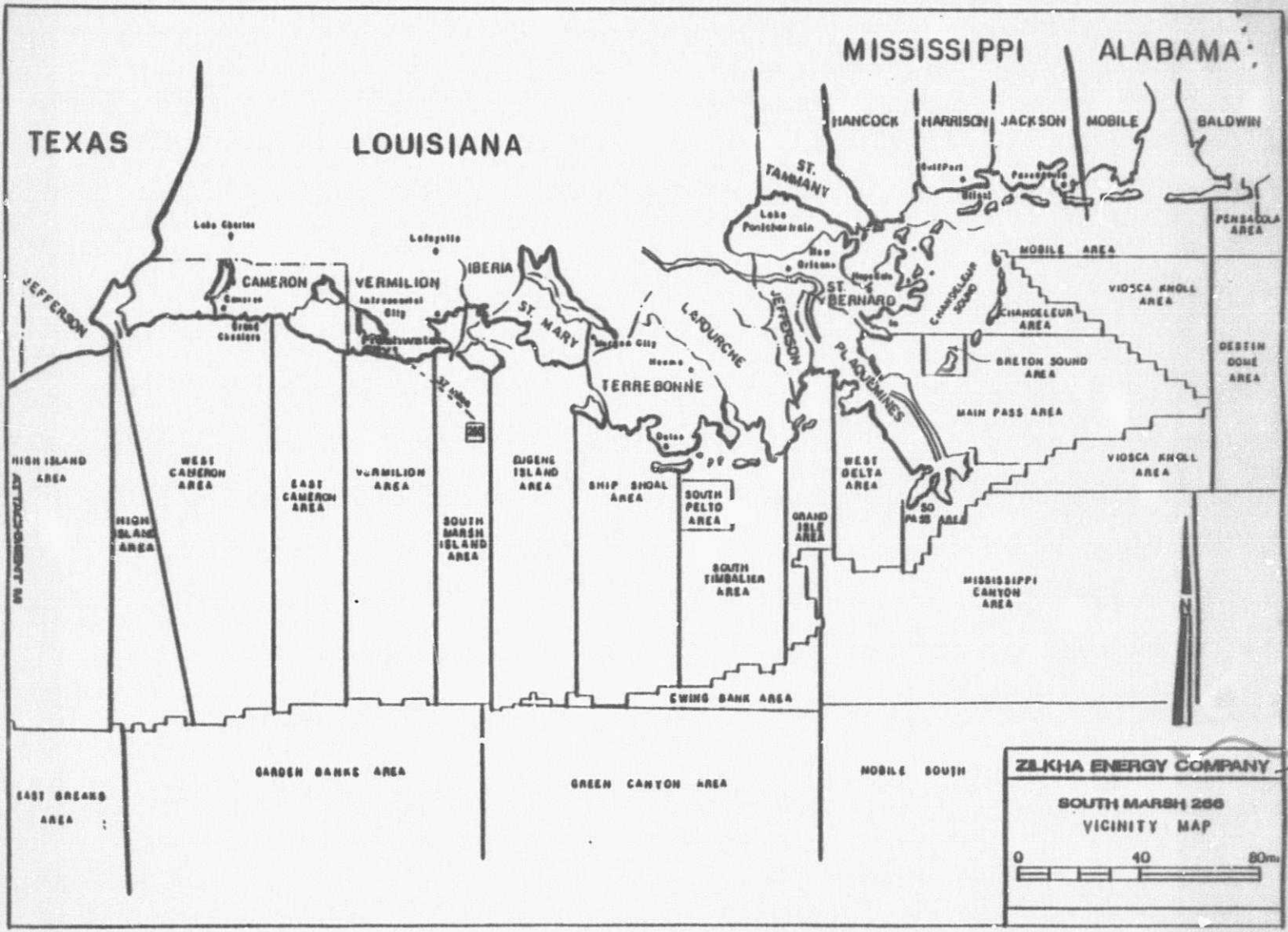
Please direct any questions concerning this request to the attention of the undersigned.

Sincerely,

ZILKHA ENERGY COMPANY

Steve Brunner
Operations Manager

SB:CJG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BRETON SOUND AREA
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